HOSPITAL ABSTRACTS

A MONTHLY SURVEY OF WORLD LITERATURE

PREPARED BY THE DEPARTMENT OF HEALTH

AND SOCIAL SECURITY

VOLUME 20, NO. 6, ABSTRACTS 751-900. JUNE 1980

LONDON: HER MAJESTY'S STATIONERY OFFICE

£1.50 net

Hospital Abstracts aims to cover the whole field of hospitals and their administration, with the exception of strictly medical and related professional matters. The abstracts purport to be fair summaries of the original papers; no responsibility can be accepted by the Department of Health and Social Security for the statements or opinions expressed in them.

Copies of publications and reprints of articles, for early notice in **Hospital Abstracts**, are invited. They should be addressed to: The Librarian, Department of Health and Social Security, Alexander Fleming House, Elephant and Castle, London, SE1 6BY, (01-407 5522, ext. 6954 or 7854) to whom also correspondence relating to the contents of the journal should be sent.

Hospital Abstracts is published monthly by Her Majesty's Stationery Office and is obtainable directly from the addresses shown on the back cover price £1.50 (£1.66½ by post). Annual subscription £21.65. Subscriptions and orders by post should be addressed to Her Majesty's Stationery Office, P.O. Box 569, London, SE1 9NH.

HOSPITAL ABSTRACTS

A MONTHLY SURVEY OF WORLD LITERATURE
PREPARED BY THE DEPARTMENT OF HEALTH
AND SOCIAL SECURITY

VOLUME 20, NO. 6, ABSTRACTS 751-900. JUNE 1980
LONDON: HER MAJESTY'S STATIONERY OFFICE

© *Crown copyright 1980*

First published 1980

ISBN 0 11 722668 8
ISSN 0018 5507

CONTENTS

	page
Hospitals in Great Britain	277
Hospitals in other countries	278
Planning, design and construction	280
Hospital design	280
Design of special departments	280
Estate Management	281
Gardens and grounds, parking	281
Engineering services	282
Installations in general	282
Communication systems	282
Heating	282
Boilers and boiler houses	282
Refrigeration	283
Energy conservation	283
Ventilation and air-conditioning	284
Maintenance of buildings and equipment	285
Piping installations	285
Equipment, fittings, furniture	285
Floors and floor coverings	285
Equipment generally	285
Medical equipment	286
Staff generally	286
Staff management	286
Staff relations	286
Staff training	287
Staff welfare	287
Special classes of staff	288
Medical staff	288
Nursing staff	288
Organization and administration	291
Economics of hospital management	292
Bed occupancy, economic use of beds	292
Appointment systems, waiting lists	292
Electronic data processing	293
Libraries and information systems	294
Medical records	295
Hospital statistics	296
Legal and ethical aspects of hospital administration	297
Other special aspects	297
Finance and accounting	297
Finance	298
Costs	299
Health insurance	299
Hospital accounting	300
Supplies and stores	300
Supplies	300
Catering, dietetics, kitchens	301
Dietetics in the hospital	301
Kitchens	301
Canteens, staff dining-rooms	302
Food service	302
Hygiene in the hospital kitchen	303
Laundries and linen service	303
Laundries	303
Hospital domestic management	304
Domestic work	304
Hygiene in the hospital	304
Prevention and control	305
Hygiene in the operating theatre	306
Sterilization	306
Air hygiene	307
Disposal of waste	307
Safety measures	307
Fires and fire prevention	308
The patient	308
Welfare of the patient	308
The general practitioner and his patients	310
Hospital care	311
Terminal care	312
Special departments	313
Wards	313
Operating suites	313
Anesthesia	313
Pharmacy	313
Laboratories	315
Blood transfusion department	315
Diagnostic X-ray department	315
Radiotherapy department	316
Rehabilitation	317
Physiotherapy department	318
Departments for special therapy	318
Intensive care units	318
Specialized hospitals and units	319
Out-patient	319
Casualty and accident	319
Day hospitals	319
Infectious diseases and isolation	320
Children	320
Geriatrics and long-stay	323
Cancer	324
Neurology and neurosurgery	325
Cardiology	325
Rheumatism	326
Urology	326
Surgery	327
Maternity	328
Gynaecology	328
Dentistry	329
Psychiatry	329
Social medicine	331
Subject index	v
Addresses of publications	x

HOSPITAL ABSTRACTS

Vol. 20 June, 1980 No. 6

HOSPITALS IN GREAT BRITAIN

751. BUTCHER, Philip, LOGAN-CANT, George and SHARPE, David, compilers. **Independent Hospital Group official reference book 1980.** London, Myddleton Publishing Co., for the Independent Hospital Group Limited, 1980. 392pp. £7.85

The Independent Hospital Group has been in existence for four years and this book lists 86 private hospitals in Great Britain. Apart from lists of addresses this volume contains articles on medical and surgical equipment, pharmaceuticals, nutrition, dentistry, administration and personnel. The chapter on hospital construction, maintenance and paramedical services has useful contributions on diverse topics from fire protection to contract cleaning. Another section consists of articles on various topics such as 'Anaerobic infections of surgical importance' and 'Transexuals on transexuality'. The book is a mixture of information, opinions and academic articles.

752. LONDON UNIVERSITY. WORKING PARTY ON MEDICAL AND DENTAL TEACHING RESOURCES. **London medical education: a new framework; report.** (Chairman: Lord Flowers). London, University of London, 1980. 79pp.

A reduction in funds combined with rising costs caused London University to review the activities of the medical and dental schools. Amongst the recommendations are: (i) integration of pre-clinical medical and dental courses; (ii) reduction of clinical facilities in Central London; and (iii) larger units. A number of specific recommendations are made for particular hospitals.

753. SHORTT, James. **A profession with the professionals?** *General Practitioner*, London, 1980, May 9, pp. 42, 43.

The Royal Military Academy at Sandhurst has a small hospital and primary care service for the army personnel there. There are two physiotherapists and a pharmacist at the hospital, whilst the Area Health Authority provides midwives and health visitors; the Royal Corps of Transport supplies an ambulance service. The hospital has only 17 beds and serious cases are transferred to the Cambridge Military Hospital in Aldershot.

754. DEPARTMENT OF HEALTH AND SOCIAL SECURITY. **Hospital services: the future pattern of hospital provision in England; a consultation paper.** London, DHSS, 1980. [iii], 19pp.

Patterns of hospital provision in England are changing. In 1969 less than a quarter of non-psychiatric beds were in hospitals of more than 500 beds, but by 1978 the proportion had risen to a third. Some planned hospitals are over 1,000 beds or more and because money is limited smaller hospitals must close. Although there are sound medical and financial arguments for concentrating services in larger units the govern-

ment is reconsidering policy. Arguments against large units include their remoteness, complexity and impersonality, and the effect these have on staff morale. Large projects, moreover, are often only half completed, leaving unsatisfactory interim provision. Overall the report recommends smaller units and better use of existing facilities.

755. GRAY, Charlotte. **Private health insurance in Britain: public opting out of NHS.** *Canadian Medical Association Journal*, Ottawa, Ont., 1980, April 5, vol. 122, no. 7, pp. 810, 813, 816, 817.

Recent years have seen increasing use made of private medical care. There are three reasons for this: (i) long waiting lists for elective surgery; (ii) growing provision of private health insurance as a fringe benefit for employees; and (iii) political differences on the role of private medicine. The development of provident associations is outlined and brief details of the major private health insurance schemes are given. The views of some proponents and opponents of private medicine are given, together with some opinions on the present state of the National Health Service.

756. ELLIS, J. **Medical education in London.** *British Medical Journal*, London, 1980, March 29, vol. 280, pp. 923-927.

The author outlines the system of medical education in Great Britain, especially London, from the setting up of the National Health Service in 1948 to the present day. In 1948 the 12 undergraduate medical schools in London became corporate bodies and were then in need of more space and faced with a demand for greater specialization in their allocated teaching hospitals. In the mid-sixties, the organization of postgraduate medical education and the situation in London were the two main problems. The report of the Royal Commission on Medical Education (Todd report, 1968) suggested reducing the London medical schools from 12 to six by pairing, but this only came about in a limited way between St. Bartholomew's and the London Hospital medical schools. As the result of larger sums of money being made available by the University Grants Committee during the 1970's, the London schools have become university medical schools to a greater extent than ever before. The changes in 1974 resulted in the combination in London teaching hospitals of the provision of district care and a range of special units backed by university support services. However, medical education in London is still a muddle and the author favours a closer combination of the St. Bartholomew's and London Hospital Schools and Queen Mary College which could provide a model for the other schools. The London schools have a unique opportunity to provide modern medical education by uniting university and hospital in the most effective way.

HOSPITALS IN OTHER COUNTRIES

757. HERMANN, J. Die Privatklinik im französischen Gesundheitsdienst. **[The private hospital in the French health service.]** *Krankenhaus-Umschau*, Kulmbach, 1980, March, vol. 49, no. 3, p. 177.

Private hospitals play an important role in the French health services. There are 3,000 such hospitals which employ about 100,000 persons; they have a total of 198,000

beds and an annual turnover of 22 million francs. On average the charge per day in private hospitals is 410 francs in medical wards and 500 francs in surgical wards: the figures for public hospitals are 692 and 963 francs respectively. There is conflict between the private and public sectors, partly because an insured person can choose the hospital he prefers and he is often looked after better in a private hospital. Leading political circles in France are anxious to integrate private hospitals to a greater extent with the public health service.

758. SCANLON, William J. **Nursing home utilization patterns: implications for policy.** *Journal of Health Politics, Policy and Law*, Durham, N.C., 1980, vol. 4, no. 4, pp. 619-641.

In the United States, nursing homes represent the fastest growing component of health care expenditure, over half of which comes from public funds. This paper reviews research on nursing home use with regard to several policy issues concerning the subsidization of long-stay care by Medicaid. As a background, the paper defines and contrasts three concepts: need, demand, and use, and then discusses the impact of public subsidization of nursing homes on use and demand. Medicaid policies can result in a chronic shortage of beds. The estimated effects on use of eight variables are discussed: Medicaid generosity, age structure, family resources, racial composition, residence, financial capability of the elderly, price of nursing home care, and alternative sources of care. It is concluded that there is a need for: (i) subsidization of a more comprehensive set of long-stay care services; a review of reimbursement policies; and improved methods of allocating existing nursing home beds among persons desiring care.

759. MULLER, M. Le traité de Rome, et les hôpitaux: 25 ans de mise en oeuvre. **[The Treaty of Rome and the hospitals: 25 years of preparation.]** *Revue Hospitalière de France*, Lyon, 1980, March, vol. 44, no. 329, pp. 538-548.

The Treaty of Rome says nothing about hospitals, and hospital organization differs from one Member State to another. However, public hospitals in all Nine Member States are confronted with the same problem—how to contain escalating costs; this is reflected in a search for quantitative and qualitative standards, better distribution of resources and facilities, and rationalization. Among the aims set out in this report are the establishment of a common public health policy, the harmonization of legislations, and harmonization of hospital financing systems. Harmonization is difficult as French hospitals are jealous of their financial autonomy. The discussion which follows the presentation of the report, suggests that foreign doctors and nurses are not likely to be welcome to work in France.

760. GOFF, David W. **The plight of the urban public hospital.** *Journal of Health Politics, Policy and Law*, Durham, N.C., 1980, vol. 4, no. 4, pp. 657-674.

Publicly owned hospitals established to provide health care for the poor in the United States have a long history. On average these hospitals have more beds than private hospitals, handle more emergency patients, provide more training, provide more out-patient services, and bear a disproportionate share of the responsibility for such services as programmes for alcoholism and other socio-medical problems. At the same time they face problems of funding, image, constituency and acceptance.

Alternative courses of action for dealing with these problems include: (i) federalization of financing; (ii) medical school affiliation or assumption of control; (iii) expansion of health care role in the community; (iv) contract management; and (v) abolition of the public hospital entity. The first four solutions are already being tried; they do not meet some major problems, but may be the best alternatives in the short run. Only the fifth alternative will provide for the poor the level of care already being provided for the rest of the population.

761. HELSINGEN, Nils. Forskning i våre fylkessykehus. **[Research in our county hospitals.]** *Sykehuset*, Oslo, 1980, vol. 43, no. 2, pp. 65-70.

This is a commentary on a report by the medical research committee of the Norwegian General Science Research Council (NAVF), published in 1979, on research in hospitals outside the university sector. It is concerned with county hospitals. So far research in this area has been largely in the field of medical staff but it is stressed that there is need for research in other areas of hospital work: collaboration between various groups of hospital staff, as well as with the primary health services, is needed. It was not thought necessary to appoint special research officers. There should however be a special research budget for which some members thought a thousandth of a hospital's total budget would suffice while others proposed a one per cent allocation. A national body to conduct such research was not recommended: each hospital should conduct its own work although advice could be obtained from the NAVF or the Norwegian Institute for Hospital Research.

PLANNING, DESIGN AND CONSTRUCTION

HOSPITAL DESIGN

762. Sentralsjukehuset Sogn og Fjordane: byggherren si oppsummering. **[Sogn and Fjordane Central Hospital: construction report.]** *Sykehuset*, Oslo, 1980, vol. 43, no. 2, pp. 73-94.

The new 334-bed, nine-storey central hospital for the county of Sogn and Fjordane (Norway) was commissioned in 1979. To allow for flexibility in use wards are not allocated strictly to particular specialties. There are five ward floors, each with two wards of 36 beds each in four-bedded or single rooms, each with a shower and toilet, on a double corridor plan. The top (9th) and the 3rd floor house technical installations while the three lower floors house treatment, examination and administrative areas. There is also a school of nursing and residential accommodation. Full details are given of technical installations, including lifts and the automatic transport system.

DESIGN OF SPECIAL DEPARTMENTS

See also Abstract No. 800

763. BORELL, Ulf and BYGDEMAN, Marc. Lagom stor kvinnoklinik. **[An adequately-sized gynaecological unit.]** *KS-nytt*, Stockholm, 1980, no. 2, pp. 3-9.

The first stage of the redevelopment of the gynaecological clinic for the Caroline

and Sabbatsberg Hospitals has now been completed, and the clinic now has 146 beds, a day unit with 10 to 12 places, a research and investigative laboratory, a birth control unit, infertility unit, and abortion unit. Further reconstruction is planned and the next stage will include construction of a new theatre block. This short description of the clinic contains nine photographs and two diagrams.

ESTATE MANAGEMENT

764. WALKER, R. **The viability of the new authorities in estate management.** *Hospital Engineering*, London, 1980, April, vol. 34, no. 3, pp. 11-13.

The Department of Health and Social Security's consultative document *Patients first* proposes the abolition of area health authorities in the National Health Service, leaving regional and district authorities. This paper examines the impact of such a reorganization on estate management. Since the 1974 reorganization of the National Health Service, a tremendous amount of expertise in the operation and maintenance of the estate has been built up at area and district level. In order to ensure that this expertise is not lost, it is necessary to continue the district works department, with a more independent role for the district works officer. Support for the district, at present provided by the area, could come from a new regional estate management department, with or without identified outposts in the districts. Means must also be found for ensuring that professional and technical standards are maintained. Districts should not be responsible for capital works with a commitment beyond two years. Closer co-operation with administration on land and property transactions is essential. Staffing questions requiring answers relate to structure, organization and people. The keys to viability in the new authorities are functional management, functional budgeting and the depth of involvment in planning. The solution lies in a unified approach by the works service as a whole.

GARDENS AND GROUNDS, PARKING

765. SCRIVENS, Stephen. **Roofgardens: Suffolk Hospital.** *Architect's Journal*, London, 1980, April 16, vol. 171, no. 16, pp. 781, 782.

Some wards at the West Suffolk General Hospital overlook the roof of the geriatric day hospital. The clerestory windows of the latter have caused considerable reflected glare in certain wards resulting in discomfort to patients. Little improvement resulted from the use of non-reflective paints and tinted window glass. It was decided, therefore, to provide a roof garden. The main problem was the low load-bearing capacity of the roof. The solution was to cover the roof with two layers of polypropylene capillary matting held in place by a coarse grade of black Netlon secured to the upper face of the clerestory by a strip of aluminium angle. This was then covered by a 100 mm thick layer of compost secured by a top layer of small mesh black Netlon wired to the base layer of Netlon. The plants, almost all containerized, were placed through holes cut in the upper layer of Netlon and firmed. The whole assembly is irrigated with mains water regulated by a solenoid valve which is activated by an electronic control unit. Photographs of the roof garden, a section showing its construction and a planting plan are included.

ENGINEERING SERVICES

INSTALLATIONS IN GENERAL

766. PEETERS, E. J. Concept installatiebeschrijving Westeinde Ziekenhuis te Den Haag. **[Description of the installations of Westeinde Hospital in The Hague.]** *Klimaatbeheersing*, Zeist, 1979, Dec., vol. 8, no. 12, pp. 646-649.

This new 600-bed hospital in The Hague consists of a 16-storey and several five or six-storey blocks. The 16-storey block contains the ward units, the central air-conditioning installation, the sterile supply unit, the physiotherapy department and the maternity department; the radiotherapy unit is in the basement. Two other blocks contain the polyclinics, X-ray unit, theatre suites, research units, day hospital, mortuary and underground garage; a third block houses technical services, kitchen, recreation hall and restaurant; a fourth block has the heating and ventilation installations with an emergency system in the cellar. The mechanical installations comprise: (i) heating and refrigeration units; (ii) air-conditioning installations with ventilation and suction systems, temperatures being thermostatically controlled; (iii) hot and cold tap water system connected to the municipal supply; (iv) piping for gases and suction; (v) sanitary installations, drainage; (vi) discharge and storage system for radioactive waste water; (vii) fire alarm system; (viii) various cooling installations. All vertical main shafts with service pipes run inside the hollow walls and are horizontally accessible on every floor. The entire cellar and underground garage can be converted into an emergency hospital for 800 patients and 400 staff. The paper gives detailed technical descriptions and illustrations.

HEATING

See Abstract No. 769

BOILERS AND BOILER HOUSES

767. MILLER, V. **The perks of recuperation.** *Natural Gas*, London, 1980, March/April, pp. 14-17.

A spray recuperation unit to increase boiler efficiency was installed at Booth Hall Children's Hospital, Manchester and produced a fuel saving of 25,000 therms of gas per year. The flue gases from the boiler pass through a tower which contains a series of baffles and a water spray. The spray distributes the water across the recuperator providing some area of contact. The water heated in the recuperator is continuously circulated and the heat recovered is given up to a secondary circuit which provides part of the domestic hot water supply. The lower the temperature of the water fed to and received from the recuperator, the more efficient the recovery. The spray re-

cuperator at Booth Hall has been so successful that a second unit has been installed, thereby doubling the therms saved per year. The installation of further units is planned by the North West Regional Health Authority. An advanced gas central heating system in the nurses' home is also saving energy at Booth Hall Hospital.

REFRIGERATION

See Abstract No. 856

ENERGY CONSERVATION

See also Abstract No. 767

768. BLEIKER, A. Energiesparen im Krankenhaus. **[Saving energy in the hospital.]** *Österreichische Krankenhaus-Zeitung*, Wien, 1980, April, vol. 21, no. 4, pp. 237-239.

A table comparing the oil and electricity consumption in five hospitals of varying size, age and technical equipment standards shows variation of between 2,138 and 5,590 litres for heating oil and of between 5,120 and 16,190 KWh for electricity per bed/year. These figures show how great the variations can be but an individual hospital must make a detailed study of its own energy consumption if definite conclusions on possible savings are to be drawn. The development of an energy saving programme over a period of 12 months is shown in tabular form and a check list of 17 energy saving measures is given.

769. DÜNSER, H. Praktische Anwendungsfälle der Wärmerückgewinnung im Krankenhausbereich: Wärme aus Müll, Abfall, Abluft und Prozessabwärme. **[Practical cases of the use of heat recovery in the hospital: heating from waste materials exhaust air and waste heat.]** *Österreichische Krankenhaus-Zeitung*, Wien, 1980, April, vol. 21, no. 4, pp. 229-233.

Before steps are taken to reduce oil consumption for heating it must first be determined where, when and how much heat or energy is needed for different purposes. The steps are: study the installations; study their use; put all the necessary questions; develop alternatives; decide on alternatives; carry out procedures; check procedures. This paper discusses heat recovery from: waste; ventilating plant; waste heat; and exhaust gases. A number of examples are given of how savings can be made under each head.

770. GRUNDSCHOBER, G. Energieeinsparung und Wärmerückgewinnung in Krankenaustalten. **[Energy saving and heat recovery in the hospital.]** *Österreichische Krankenhaus-Zeitung*, Wien, 1980, April, vol. 21, no. 4, pp. 234-236.

There are a number of technical possibilities for reducing the primary energy

requirements in hospitals. Careful maintenance of conventional boiler systems will reduce heat loss. Waste heat from power stations can be used for the heating of hospitals. These two methods are principally of use for urban hospitals but another system, that of block heating power stations, producing electric current by means of generators driven by gas-fired or oil-fired motors, can be used for more isolated hospitals. Another means of saving heat is the use of heat pumps which raise the temperature of waste and environmental heat by using additional energy. There are also three systems for recovering waste heat from ventilation installations. These are: circulating recuperative heat recovery; recuperative plate or tube exchange systems; and regenerative heat recovery.

VENTILATION AND AIR-CONDITIONING

771. STEFFEN, K. Möglichkeiten zur technischen Erneuerung raumlufttechnischer Anlagen für Operationssäle in Krankenhaus-Altbauten. **[Approach to technical renewal of ventilating plants for operating theatres in old hospital buildings.]** *Klima Kälte Heiz*, München, 1980, Jan., vol. 8, no. 1, pp. 33-38.

Experience has shown that the ventilating plant in the operating theatres of older hospitals does not meet the requirements of the German Standard DIN 1946, Part 4, which was published in April 1948. Deficiencies include the following: the air supply is not adequately filtered; the humidification equipment is contaminated and is a breeding place for micro-organisms; the air intake is at ground floor level; fan performance is too low; and (last but not least) air-conditioning installations are lacking in hygiene. The technical renewal of such equipment in older hospitals is discussed under the following heads: basic construction of air-conditioning plant in operating theatres; possibilities for renewing air-conditioning plant in old hospital buildings; and the recovery and saving of energy.

772. HOENDERKAMP, F. Th. A. Ziekenhuis renovatie II: renovatie van het luchtbehandelings—systeem in de beddenkamers. **[Hospital renovation II: renovation of ward air-conditioning systems.]** *Technische Gids voor Ziekenhuis en Instelling*, Amsterdam, 1980, April, vol. 49, no. 1159, pp. 145, 147, 149.

Dijkzicht Hospital (Rotterdam), which previously relied on opening windows for ward ventilation, has a new air-conditioning system. This system required conversion of some wards into machine rooms with an air-conditioning chamber for ventilation of the wards and connection to the central ventilation system. Air reached the wards via horizontal channels running in a concealed recess along the side of the corridor. Machine rooms are situated vertically above each other which enables pipes and cables to run vertically from the cellar to the twelfth floor; this design allowed installation work to be carried out with a minimum of disturbance. The machinery maintains an air balance in the wards, thus reducing the risks of cross infection. A technical description is given of the layout and equipment, covering such points as the circulation and treatment of the air, temperature and humidity control, air cooling equipment, and sound proofing. The paper includes four pictures.

MAINTENANCE OF BUILDINGS AND EQUIPMENT

See also Abstract No. 835

773. AMPENBERGER, G. Wartung im Krankenhaus. **[Maintenance in the hospital.]** *Krankenhaus-Umschau*, Kulmbach, 1980, March, vol. 49, no. 3, pp. 179, 180, 189, 190.

Proper maintenance of hospital equipment and installations ensures that its efficient working as well as its safety is kept on an optimal level. A detailed account of maintenance requirements is given; the types of maintenance (medical equipment, domestic equipment, installations, irradiation equipment, gases and chemicals) are discussed. The advantages and disadvantages of using direct labour rather than outside contract staff are set out.

PIPING INSTALLATIONS

774. RAWLINSON, Carole. **An evaluation of the scale of provision of oxygen and suction outlets in inpatient bed areas: summary report and conclusions.** [London], Polytechnic of North London, Medical Architecture Research Unit, 1979. [ii], 12pp. (M.A.R.U. 4/79)

Changing patterns of nursing care and a changing mix of patients on wards prompted the Department of Health and Social Security to commission this study. Empirical surveys of current oxygen and suction usage were conducted in a number of hospitals and a statistical model applied to predict the level of provision of terminal outlets necessary to meet various patterns of demand. Recommendations for various ward sizes and specialties are made.

EQUIPMENT, FITTINGS, FURNITURE

FLOORS AND FLOOR COVERINGS

775. **Know your floor.** *Hospital Equipment and Supplies*, London, 1980, April, vol. 26, no. 4, pp. 42-44.

Irrespective of brand names, floor surfaces fall into three main categories: semi-porous, porous and non-porous. Examples of each are listed. The types of soil (dirt, scale, stains, etc.) which have to be removed from floors are described briefly. A table indicates the compatibility of the various types of cleaning materials with different types of floors. Seals and spray maintenance are also discussed.

EQUIPMENT GENERALLY

See Abstract No. 833

MEDICAL EQUIPMENT

See also Abstract No. 889

776. KVARNHEM, Tommy and OLSSON, Mats. Får sjuksköterskor tillräcklig utbildning i medicinsk teknik? **[Do hospital nurses get sufficient training in medical technology?]** *Vårdfacket*, Stockholm, 1980, April 3, vol. 4, no. 7, pp. 14-16.

A questionnaire sent to hospitals in Sweden has shown that post-basic training in the use of medical equipment and medical gases for nurses working in intensive care or anaesthesia departments is limited to between eight and 29 hours and that half of those taking courses have to take a written examination. The proposal put forward here is that such post-basic training should extend over 30 hours, that the course should be called 'medical technology' and that it should be followed by a written examination. The paper includes a suggested syllabus for the course.

STAFF GENERALLY

STAFF MANAGEMENT

777. ABRESCH, Jürgen. Viele Probleme—kaum eine Lösung: Personalbeurteilung im Krankenhaus. **[Many problems with hardly a solution: staff assessment in the hospital.]** *Deutsche Krankenpflege-Zeitschrift*, Stuttgart, 1980, May, vol. 33, no. 5, pp. 287-290.

Although the problems and their solutions discussed in this paper by a psychologist are to some extent of general application, they are mainly concerned with the assessment of the character and work of student nurses. The difficulties associated with the objective judgment of student performance and the interpretation of report forms are discussed. It is concluded that existing methods are not satisfactory. Three measures which should bring about improvements are put forward: the introduction of a tutorial system; the replacement of the report form by an assessment based directly on a differentiated list of learning objectives; and the replacement of graded markings by the assessment 'learning objective attained' or 'not attained'.

STAFF RELATIONS

See also Abstract No. 877

778. GIDEON, Jacqulyn. **The American Nurses Association: a professional model for collective bargaining.** *Journal of Health and Human Resources Administration*, Montgomery, Ala., 1979, Aug., vol. 2, no. 1, pp. 13-27.

Registered nurses are the largest group of health care workers in the United States. Of the 900,000 in employment, about 110,000 are working under contracts negotiated by affiliates of the American Nurses Association (ANA) and about 20,000 are represented by various trade unions. The balance is not yet under contract. Since the

1974 Health Care Amendments to the National Labour Relations Act placed the employees of health care institutions under the protection of that Act, ANA has experienced accelerated activity in collective bargaining, but it has always had a strong interest in its members' welfare. This paper outlines the structure and function of ANA and discusses its policy on collective bargaining, bargaining units and contract provisions. The structure of ANA and of the state nursing associations is a traditional professional association model which as been modified to accommodate the trade union function. Their functions in the collective bargaining are much like those of traditional trade unions, but with important additions in contract terms to meet the particular needs of the professionals they represent. With changes in structure to meet the new challenges, ANA will continue to be the vehicle most often selected by nurses to represent them.

779. GORDON, Murray A. **Physicians and collective bargaining.** *Journal of Health and Human Resources Administration*, Montgomery, Ala., 1979, Aug., vol. 2, no. 1, pp. 59-72.

All doctors participate collectively through their representation on committees and other instruments of governance. Collective bargaining, however, connotes special dimensions, dealing with terms and conditions of service. Only those physicians who are hospital-based and salaried, about one-third of the profession in the United States, are within the scope of the National Labour Relations Act. Problems which arise in applying the Act to medical staff include: (i) managerial and supervisory staff are excluded; (ii) difficulties in defining 'employer'; (iii) the scope of bargaining; (iv) tenure; (v) the special nature of physician collective bargaining; and (vi) the position of strikes as the ultimate weapon in collective bargaining. Collective bargaining for physicians has long been characterized by lack of legal authorization and by individual shibboleths. The matter is now more likely to be brought out into open consideration. If and when it becomes fully developed it will be unique, for every professional pursues goals beyond pay. It may serve as an example for other professions.

STAFF TRAINING

See Abstract Nos. 752, 756, 776, 782, 785, 786, 791

STAFF WELFARE

See also Abstract Nos. 836, 851

780. PATRICK, P. K. S. **Burnout: job hazard for health workers.** *Hospitals*, Chicago, Ill., 1979, Nov. 16, vol. 53, no. 22, pp. 87, 88, 90.

'Burnout' is a term applied to all health service staff, particularly those delivering direct care in special units, who suffer from emotional exhaustion due to pressure of work. Early symptoms are physical and include fatigue, sleep disturbances and changes in appetite. Consequent psychological changes include: (i) changes in attitudes towards patients and supervisors; (ii) growth of self-deprecation accompanied by loss of job

satisfaction; and (iii) periods of depression and difficulty in making decisions. Self-generated causes of 'burnout' include: (i) the emotional demands of patient cases which cause stress; (ii) lack of self-awareness by staff of their own problems; and (iii) stress in personal life. 'Burnout' may be caused by factors in the work setting including: (i) work demands, including the isolation of responsible posts; (ii) the atmosphere of the work setting; and (iii) lack of support for employees. Any programme to prevent 'burnout' should include prevention, intervention and management. The staff's own assessment of their problems is also important.

SPECIAL CLASSES OF STAFF

See also Abstract Nos. 753, 855, 863

MEDICAL STAFF

See also Abstract No. 779

781. SHORTELL, Stephen M. and GETZEN, Thomas E. **Measuring hospital medical staff organizational structure.** *Health Services Research*, Chicago, Ill., 1979, vol. 14, no. 2, pp. 97-110.

Based on organization theory and the work of Roemer and Friedman, seven major dimensions of medical staff organizational structure are proposed and tested empirically using data obtained from the American Hospital Association's 1973 national survey of medical staff organization. The dimensions are: (i) resource capability; (ii) formalization; (iii) centralization; (iv) commitment; (v) communication/control; (vi) participation in decision making; and (vii) primary care orientation. Factor analysis yielded six relatively independent dimensions supporting a multidimensional view of medical staff organizational structure: (i) resource capability; (ii) generalist physician contractual obligation; (iii) communication/control; (iv) local staff orientation; (v) participation in decision making; and (vi) hospital-based physician contractual orientation. It is suggested that these dimensions can be used to develop an empirical typology of hospital medical staff organizational structure and to investigate the relationship between medical staff organization and public policy issues related to cost containment and quality assurance.

NURSING STAFF

See also Abstract Nos. 776, 777, 778, 799, 845, 865, 877, 890, 895

782. Anleitung einer Schülerin des ersten Ausbildungsjahres auf einer chirurgischen Station. **[Initiating the first year student nurse on the surgical ward.]** *Deutsche Krankenpflegezeitschrift*, Stuttgart, 1980, May, vol. 33, no. 5, pp. 260-267.

This is an account of how first-year student nurses are introduced to the work of a surgical ward. The total initiation period lasts five weeks. For the first three weeks the

tutor works on the ward without students in order to become fully familiar with conditions and routines. She then works with a student for one week on the early shift and one week on the late shift, with week-end duty in between. The paper includes full details of the daily routine and the instruction given.

783. QUINN, Sheila, editor. **Nursing in the European Community.** London, Croom Helm, 1980. 192pp. ISBN 0 7099 0080 5 £9.95

The European Communities' Nursing Directives, signed in 1977, have recently become operative. This book explains the content and implications of the new legislation in relation to the current situation of the nursing profession in each of the nine member states, in the context of directives for the other major health professions. Chapters on the development of nursing and nursing education are written by senior nurses of the countries concerned and include references to health care systems and benefits. The book also discusses freedom of movement to work within the Community and guidelines on the acceptable minimum standards of nurse education.

784. BEYERS, Marjorie and PHILLIPS, Carole. **Nursing management for patient care.** 2nd edition. Boston, Mass., Little, Brown, 1979. ix, 292pp. bibliogs. ISBN 0 316 09265 7 £7.20

Most nurses are employed as part of an organization, so for many line management is important, and even nurses who have no other nurses to manage must manage their patient care. This book is intended for nurses making the transition from being students involved with individualized patient care to being employees in an organizational structure. The authors believe that management theory is important as well as leadership. There are three parts to this study. Part one deals with general management theories on organizations and organizational policies. Part two has specific information on day-to-day techniques and deals with the behaviour of managers in matters such as discipline, motivation and staff assessment. Part three presents some case studies.

785. SOLOMONS, Hope C., JORDISON, Nancy S. and POWELL, Sandra R. **How faculty members spend their time.** *Nursing Outlook*, New York, 1980, March, vol. 28, no. 3, pp. 160-165.

A study of all teaching staff at the University of Iowa in 1974 found that although the working week for the staff as a whole was 57.4 hours, for the college of nursing it was only 52.6 hours. When the nursing faculty questioned this finding, the study reported here was undertaken. A time log was kept for the same seven-day period, including Saturday and Sunday. It covered teaching (14 activities), research (six activities), service (six activities) and professional growth (six activities). Responses were obtained from 48 (62 per cent) of the 78 members of the teaching staff. The average time spent on the four categories of activities was: teaching, 37.3 hours; professional growth, 8.0 hours; service, 4.8 hours; and scholarly productivity, 3.4 hours. The results confirm that the college of nursing teaching staff work long and hard, but not as long as those in other faculties. The findings are discussed, with particular reference to possible deterents to research activity.

786. KRUSE, Anna-Paula. Das Selbstverständnis des Pflegeberufeswas kann die Ausbildung dazu beitragen? **[How can training contribute to the self-realization of the nursing profession?]** *Deutsche Krankenpflege-zeitschrift*, Stuttgart, 1980, May, vol. 33, no. 5, pp. 268-272.

A number of factors have contributed to changes in the theory and practice of nursing over the years. These include: reduction in working hours; small patients' rooms instead of large wards; enormous developments in medicine and technology; changes in hospital organization; and changes in the attitude of the community toward hospital services. The tendency is for the nurse to become the 'skilled doctor's assistant'. But it must not be forgotten that the nurse's task is to care for the patient, not to care for an illness. The consequences of these changes for the profession of nursing are discussed in three areas: the school of nursing and the ward; the hospital authority and the nursing staff; and statutory provisions.

787. AAEN, Eva. Egenomsorg—en del af sygeplejerskens funktion: omsorg kan ikke adskilles fra egenomsorg. **[Self-care—a part of the nurse's work: nursing care cannot be separated from self-care.]** *Sygeplejersken*, København, 1980, Feb. 27, no. 9, pp. 8-15.

Self-care (the term preferred to self-treatment or self-help since it more exactly implies the care of the 'whole' person) is defined as the preventive, diagnostic and treatment measures which people carry out themselves; this includes knowledge of when and how to use treatment apparatus. The nurse has an important role to play in self-care, both in and outside the hospital. This role includes helping and advising on the maintenance of health and encouraging patients in hospital to do as much for themselves as possible. If the patient does more for himself the nurse has more time to devote to her real tasks. Self-care should lead to more use of the primary health services and thus reduce the use of expensive in-patient care. Experience in Denmark has shown that self-care is successful in the majority of cases.

788. SEEWOOLALL, R. **To nurse the mentally handicapped in the institutional setting.** [Bracknell], The Author at Church Hill House Hospital, 1980. [ii], 8pp.

Hospitals are institutions and institutions tend to be impersonal and administration oriented. This short paper gives a description of some research on institutionalization and suggests some ways of making hospitals patient oriented. The author recommends—(i) varying the pattern of care from one day to another; (ii) encouragement of use of personal belongings; (iii) mixing of staff and patients at meals and social functions; and (iv) development of communication and acceptable social behaviour in everyday situations.

789. Klinisk sygepleje og sygeplejeadministrationen. **[Hospital nursing and nursing administration.]** *Sygeplejersken*, København, 1980, Jan. 30, no. 5, pp. 4-7; Feb. 6, no. 6, pp. 4-7, 22; Feb. 13, no. 7, pp. 16-19; Feb. 20, no. 8, pp. 12-16; Feb. 27, no. 9, pp. 4-7.

This is a series of five papers on different aspects of hospital nursing and nursing administration in Denmark. The first, by Inger Lund Laursen, Chief Nursing Officer at Skanderborg Hospital, deals with the solution of problems in relation to hospital

nursing. The second, by Mona Frederiksen, Chief Nursing Officer at Copenhagen County Hospital, has the title 'professional leadership, not bureaucracy'. The third, by Mette Holler and Merry Scheel (heads of departments at the Danish School of Nursing), deals with the need for nurses to understand patients as human beings. Part four, by Ellen Larsen, Chief Nursing Officer at St. Hans Psychiatric Hospital, Roskilde is entitled 'psychiatric nursing has developed into a dynamic task'. Part five, by Sonja Refslund Skrumsager, of Aalborg Psychiatric Hospital, stresses that the treatment and nursing care of psychiatric patients should start before a stay in hospital and continue after it, and that there should be more definite views of what a stay in hospital should aim at.

790. ROSENTHAL, Carolyn J. and others. **Nurses, patients and families.** London, Croom Helm, 1980. 168pp. bibliog. ISBN 0 7099 0151 8 £8.95

This book analyzes the way in which nurses, patients and families interact in the hospital setting. The ways in which nurses label or make assumptions about patients are shown, along with the views of the patient and his relatives. One finding is that nurses perceive behaviour problems in patients which are defined in social and emotional terms and considered outside the scope of nursing. The major problem areas discussed are: (i) the behavioural components of care; (ii) decision-making within the health care team; (iii) participation by patients and families in medical care; and (iv) sex role stereotyping.

791. PLUNSER, Christel. Anleitung und Ausbildung von Schülerinnen innerhalb einer Pflegegruppe. **[The initiation and training of student nurses within a nursing group.]** *Deutsche Krankenpflegezeitschrift*, Stuttgart, 1980, no. 5, supplement; pp. 1-7.

This paper sets out the problems involved in the practical training of student nurses within a nursing group and the ways in which they can be overcome. Qualified nurses should have better training in the teaching and supervision of student nurses in a group, and groups should be staffed so that nurses have more time to devote to students. The training of students should follow a uniform plan for the whole hospital or specialty. There must be good contacts between the school of nursing and nursing groups. With all the specialized knowledge and expertise it must never be forgotten that nurses, student nurses and patients are all human beings.

ORGANIZATION AND ADMINISTRATION

See also Abstract Nos. 781, 813

792. DÖTTL, Alfred. Die Aufbauorganisation der Krankenhaus-Verwaltung. **[The organization of hospital administration.]** *Krankenhaus-Umschau*, Kulmbach, 1980, March, vol. 49, no. 3, pp. 175-177.

The administrative service of a hospital, with the chief administrator in charge, has the task of helping the hospital to achieve its full medical objectives within the framework of the hospital's plan. It is particularly concerned with economic management and efficiency. This paper sets out objectives and tasks, and the responsibilities under the following heads: organization, data processing and review; general admini-

stration and personnel management; accounting; patient services and patient-related administration; supplies and disposal services; domestic services, laundry and catering; and technical services.

793. LAUX, Erberhard. Das Krankenhaus als wirtschaftender Betrieb. Planung, Steuerung, Kontrolle. **[The hospital as an efficient undertaking: planning, management, control.]** *Krankenhaus-Umschau*, Kulmbach, 1980, March, vol. 49, no. 3, pp. 159-162.

Activities directed at improving the efficiency of West German hospitals since the introduction of new legislation in 1972 are reviewed, with special reference to the need for improved accounting systems. Stress is laid on the importance of detailed commercial accounting and on the position of the chief administrator as the co-ordinator and controller of all the hospital's activities.

ECONOMICS OF HOSPITAL MANAGEMENT

See Abstract Nos. 810, 818, 824, 858, 886

BED OCCUPANCY, ECONOMIC USE OF BEDS

See also Abstract Nos. 878, 900

794. JÖNSSON, Bengt and LINDGREN, Björn. **Five common fallacies in estimating the economic gains of early discharge.** *Social Science and Medicine*, Oxford, 1980, March, vol. 14C, no. 1, pp. 27-33.

Several studies have shown that it is possible to reduce the length of stay after surgery without increasing medical complications. But, there is also the question of how this will affect the total costs for medical care and therefore whether it is in fact desirable to cut down the length of stay. This paper examines the argument for early discharge in the light of five common fallacies that have appeared in the literature: (i) a reduction of one day in the hospital saves one day's costs; (ii) a reduction in length of stay means the waiting list can be correspondingly reduced; (iii) length of stay can be reduced without any corresponding increase in costs in the primary care sector; (iv) length of hospital stay can be reduced without increasing the care input or the welfare loss of the patient's family and friends; and (v) length of stay can be reduced without causing any loss in welfare to the patient. It is asserted that the social costs of early discharge often tend to be underestimated and the savings overestimated, with the consequent risk that the overall advantages of the shorter time in hospital may be over emphasized.

APPOINTMENT SYSTEMS, WAITING LISTS

See also Abstract No. 893

795. WHITE, A. **A step towards representation, clarification and solving of waiting list information problems.** Cardiff, South Glamorgan Health Authority (Teaching), Management Services Department, Information Unit, [1980]. 12pp.

Hospitals must meet the changing health needs of the population and waiting

lists are often used as yardsticks to measure their efficiency. The author directs attention away from waiting lists in isolation and towards other factors which, considered together, give a clearer picture of the problems causing long waiting lists. It is suggested that reports on lengths of waiting lists should become part of normal management information.

796. FROST, C. E. B. **How permanent are NHS waiting lists?** *Social Science and Medicine*, Oxford, 1980, March, vol. 14C, no. 1, pp. 1-11.

A model of consultant behaviour is presented and is used to test the hypothesis that a one per cent increase in consultant numbers will lead to a one per cent increase in the waiting list. National Health Service time-series data for in-patient general surgery are used for the test. The econometric formulation of the hypothesis is able to distinguish between short- and long-run effects, and it is suggested that 78 per cent of the final increase in waiting lists will have occurred within two years of the increase in consultant numbers. Although the findings of this study are not particularly encouraging for policy-makers anxious to reduce waiting lists, some possible initiatives in the area of waiting list management are assessed. It has been suggested that waiting lists exist because consultants are able to control their own work load. It follows that waiting lists will remain a problem as long as consultants are guided by an inappropriate incentive structure. Hence an admissions index or something similar should bring about a harmonization of admission policies.

ELECTRONIC DATA PROCESSING

See also Abstract Nos. 801, 805, 857, 858, 884

797. BENNETT, Sharon Wraith and SCOTT, A. Carlisle. **Computer-assisted customized antimicrobial dosages.** *American Journal of Hospital Pharmacy*, Washington, D.C., 1980, April, vol. 37, no. 4, pp. 523-529.

This paper describes the use of a computer program, Mycin, to customize dosage regimens of antimicrobials for patients with meningitis or bacteraemia. The programme, which is operational within a research setting, makes therapeutic decisions using its built-in knowledge of infectious diseases, together with clinical and laboratory data about the patient. The large knowledge base contains data on organism susceptibilities to drugs, epidemiology of infectious diseases, and pharmacogenetics and toxicity of various antimicrobials. Using this data the computer program determines appropriate treatment specific to a patient's age, renal function, and prior drug reactions. The program can provide physicians with clinical advice and educational information when human consultants in infectious diseases are not available.

798. Compleet computergebeuren in RKZ in Groningen; specialist doet verslagleggingen verwerking gegevens per computer, röntgenafdeling en isotopenlab geautomatiseerd. **[Full computerization in the Roman Catholic Hospital, Groningen; computerized reports and data storage, automated X-ray unit and isotope laboratory.]** *Technische Gids voor Ziekenhuis en Instelling*, Amsterdam, 1980, April, vol. 49, no. 1159, pp. 120-123, 125.

From January 1981 the Roman Catholic Hospital, Groningen, will have its own

computer for such functions as accounting and production of statistics, as part of a computer decentralization plan. The plan, in collaboration with 10 other hospitals, is based on the 'Attached Resources Computer' concept: a multi-processing system with locally placed processors connected in a certain hierarchy. The advantages are: (i) local containment of breakdowns; (ii) flexibility because of its relatively simple modular structure; and (iii) information quickly available through 'on line' access to data. Other hospitals able to adapt, can join. Ten staff are employed in the development of the system and the aim is for each hospital to have its own automation expert. The computer system covers: (i) the hospital's general administration, including patient registration, finances, stores, etc.; (ii) the X-ray unit, where a computerized report preparation system operates; (iii) the isotope laboratory for analyses of certain substances; (iv) medical statistics; and (v) theatre statistics. The increasing amount of treatment compared with the small increase in numbers of staff justifies the cost of automation.

LIBRARIES AND INFORMATION SYSTEMS

799. PARR, Linda J. **Early libraries for nurses in England, 1860-1914.** *Journal of Librarianship*, London, 1980, April, vol. 12, no. 2, pp. 102-114.

An examination of the content and quality of early nursing literature confirms that it is more substantial than has hitherto been generally recognized. The same is true of libraries for nurses, several examples of which are mentioned. However, many nurses had no access to a library at all. Any inadequacy in library facilities was caused by the geographical distribution, small size of hospitals and the lack of administrative centralization rather than absence of a literature. A list of 48 references to the literature is included.

800. YEOH, Josephine W. **The planning stages of building a new or remodeled hospital library.** *Hospital Topics*, Sarasota, Fla., 1980, March/April, vol. 58, no. 2, pp. 53, 54, 10.

In 1976, space limitations in the library at Riverside Methodist Hospital, Columbus, Ohio, had become critical. At the same time the noise level resulting from no carpeting, no office and no staff work space was very upsetting to users. When the hospital offered another 160 square feet more space, a request for a Medical Library Resource Project Grant from the National Medical Library was turned down, with criticisms of the administration's lack of support for the library. This, together with statistics prepared by the librarian, and a report by the director of medical education, convinced the board of trustees that a new library was necessary. After considerable and lengthy discussions with administrators and architects, plans for a two-storey, 10,000 square feet library were approved. Tenders came in at around $1.4 million, excluding furniture and equipment. In the light of her experience, the author gives advice to others contemplating building a new library or remodelling an existing one.

801. AUSTIN, Charles J. **Information systems for hospital administration.** Ann Arbor, Mich., Health Administration Press, 1979. xiii, 278pp. bibliogs. ISBN 0 914904 30 2

This book is intended to aid hospital and health administrators in understanding

information systems and in seeing how they can use these systems. Information is defined as data which has been processed and analyzed in a formal, intelligent way. The uses of information are: (i) establishment of institutional goals and objectives; (ii) demand estimation; (iii) resource allocation; (iv) performance and quality control; and (v) evaluation of program impact. After an introductory section the author has a number of chapters on information systems analysis, design and implementation. Lastly, there is a practical section on information systems in the hospital, with an actual case study. A glossary and a key to flow chart symbols is provided.

MEDICAL RECORDS

See also Abstract No. 798

802. FISCHBACH, Ruth L. and others. **The patient and practitioner as co-authors of the medical record.** *Patient Counselling and Health Education*, Princeton, N.J., 1980, vol. 2, no. 1, pp. 1-5.

Health care professionals traditionally have resisted patient access to medical records. At Beth Israel Ambulatory Care Center, Beth Israel Hospital, Boston, Mass., 20 patients and four staff participated in a one-year pilot project in which the patients collaborated in the authorship of their medical records. Initial impressions suggest that co-authorship of the record is an effective means of conveying more complete, accurate and understandable information to both patient and provider. The patient-held copy of the record served as an adjunct to this collaborative process. The potential problems and prospects arising from this strategy are discussed.

803. BENJAMIN, Bernard, editor. **Medical records.** 2nd edition, London, Heinemann Medical, 1980. xi, 257pp. bibliogs. ISBN 0 433 02451 8 £7.95

For those interested in United Kingdom medical records this book contains valuable information. The early chapters explain how records can be kept and the mechanics of that process, including the International Classification of Diseases and diagnostic indexing. Later chapters explain how the recorded information can be used and give details of the statistical returns made to the government. The final chapters deal with aspects such as legal considerations and computerization. Much useful specific information is given and wherever possible illustrations are given of particular forms.

804. GORDIS, Leon and GOLD, Ellen. **Privacy, confidentiality, and the use of medical records in research.** *Science*, Washington, D.C., 1980, Jan. 11, vol. 207, no. 4427, pp. 153-156.

This article reviews the implications of confidentiality in the use of medical records for medical and epidemiological research in the United States. The importance of the use of records relating to individuals in population based medical research is explained. Health studies requiring such records have covered cancer, cardiovascular disease, infectious disease and child health, to name but a few. Any requirement that the patient's consent be obtained before the medical record is studied would be very obstructive, as the record is often the starting point for further investigations. Often investigations need to be carried out from one generation to the next, for example,

to study links between drug taking in pregnancy and the consequent health of the offspring. Occupational cancer, oral cancer and radiation are other fields where the study of the medical records relating to certain groups is vital to research. All researchers have a duty to minimize invasion of privacy and the National Research Act provides an elaborate system of safeguards. However, the lack of protection from subpoena of data gathered for research remains a problem for the researcher. The maintenance of health and protection from environmental hazards depends upon medical records remaining readily available for epidemiological research.

805. NORDEN, Gerd. Datenschutz im Krankenhaus: Probleme, Aufgaben und Ziele. **[Data protection in the hospital: tasks and objectives.]** *Krankenhaus*, Stuttgart, 1980, March, vol. 72, no. 3, pp. 77-82.

The West German Federal Data Protection Act, which is applicable to hospital records, makes provision for the proper collection, storage and dissemination of information by means of data processing installations. The Act does not cover medical records and files which are not processed in a data storage system. Regulations governing the admissibility of data processing, the right of patients to be informed about such procedures and to have access to information, and the confidentiality of stored data (including the members of staff who should be allowed access to it) are discussed and explained. Assessing the conflict of interests between the requirements of the processing unit and protection of the rights of the patients is admitted to be 'more than difficult'.

HOSPITAL STATISTICS

806. UNITED STATES. NATIONAL CENTER FOR HEALTH STATISTICS. **Inpatient health facilities as reported from the 1976 MFI survey by Jeannie Fox Sutton and Al Sirrocco.** Hyattsville, Md., National Center for Health Statistics, 1980. iv, 65pp. (Vital and Health Statistics Series 14 No. 23; DHEW Publication No. (PHS)80-1818) ISBN 0 8406 0170 0

The Master Facility Inventory (MFI) collects statistics about nursing homes, hospitals and other in-patient health facilities and includes number of institutions, beds and employees. Details are given of types of ownership, geographical distribution, and comparisons with results of previous MFI surveys. The data is for the United States and was collected during May-August 1976.

807. SPORTELLI, A. and CECCATO, G. Indagine statistica sull' interruzione volontaria della gravidanza presso l'ospedale Canta Corona di Garbagnate Milanese. **[Statistical study on voluntary interruption of pregnancy in the Santa Corona Hospital in Garbagnate Milanese.]** *Ospedale*, Torino, 1980, March, vol. 33, no. 3, pp. 91-95.

The Santa Corona Hospital in Milan has an 80-bed obstetrics and gynaecology unit. The staff consists of eight doctors, four of whom objected to performing abortions, and 44 nurses, 10 of whom were unwilling to assist at abortions. The author presents data on the abortions performed at that hospital during the first six-month period after the entry into force of the Italian law permitting abortion for socio-economic reasons. Demand was so great that there was a waiting list on account of

the time taken to carry out laboratory tests. In all, there were 195 abortions, all of which were performed in or before the 12th week of pregnancy. Six block graphs are used to show the occupation and age-group of the patients, the number of previous abortions and number of children they had had, and the week of pregnancy in which the abortion was carried out. The authors would prefer to see hospital abortions confined to those women whose lives are at serious risk, and other facilities made available for those who choose to have abortions for socio-economic reasons.

808. UNITED STATES. NATIONAL CENTER FOR HEALTH STATISTICS. **Utilization of short-stay hospitals: annual summary for the United States, 1978, by Barbara J. Haupt.** Hyattsville, Md., National Center for Health Statistics, 1980. iv, 63pp. (Vital and Health Statistics Series 13 No. 46; DHEW Publication No. (PHS)80-1797) ISBN 0 8406 0185 9

Statistics are presented in this report on the utilization of non-federal short-stay hospitals based on data collected by means of the National Hospital Discharge Survey from a sample of the hospital records of discharged in-patients. Estimates are provided by the demographic characteristics of patients, by geographical region, bed size and ownership of hospitals. Details are given of conditions diagnosed and surgical operations performed. Measurements of hospital use are given in terms of frequency, rate per cent and average length of stay.

LEGAL AND ETHICAL ASPECTS OF HOSPITAL ADMINISTRATION

See Abstract Nos. 804, 805, 837, 870

OTHER SPECIAL ASPECTS

809. FRIEDMAN, Bernard, PIERSKALLA, William and BEAZOGLOU, Tryfon. **Sharing arrangements in the nonprofit hospital industry.** *Health Services Research*, Chicago, Ill., 1979, vol. 14, no. 2, pp. 150-159.

Although there has been only a modest amount of merger activity among United States hospitals since 1960, a significant growth in sharing arrangements has occurred. The major task of this paper is to develop hypotheses about voluntary sharing arrangements from a plausible economic analysis of the hospital industry. The second task is to review some emerging evidence about sharing arrangements. The research suggests that some sharing arrangements could or actually do reduce hospital costs to the community. However, there are indications that cost reduction is neither a necessary nor a significant factor in the success of many sharing arrangements.

FINANCE AND ACCOUNTING

810. GUTHARDT, Evelyn. Zur Prüfung der wirtschaftlichen Verhältnisse im Krankenhaus. **[Controlling economic conditions in the hospital.]** *Krankenhaus-Umschau*, Kulmbach, 1980, March, vol. 49, no. 3, pp. 165-167.

The methods of assessing the economic conditions and thus the efficiency, of a

hospital's services are discussed under the following heads: (i) the treatment of the subject in the relevant literature; (ii) the classification of test measures; (iii) analysis of tests as a basis for evaluating economic conditions in the hospital; and (iv) the content of assessment procedures. Under the latter heading a check list is given of the questions to be asked when determining the financial situation and the quality of performance.

811. SCHÖPF, A. Gesamtwirtschaftliche Aspekte des Gesundheitswesens unter besonderer Berücksichtigung des Krankenhauswesens. **[General economic aspects of health services with special reference to hospital service.]** *Österreichische Krankenhaus-Zeitung*, Wien, 1980, Jan., vol. 21, no. 1, pp. 15, 16, 19, 20.

The economic aspects of health services (with particular reference to the Austrian hospital service) are discussed and the conclusions summarized in the following six theses: (i) the development and structure of a community's health services are directly related to the economic development; (ii) a financing system is to be developed which 'feeds' the main areas of the health service in general agreement with economic development and thus with the total available means; (iii) the proportion of the gross national product which, by the democratic process, is to be devoted to health services is the financial provision to be allocated to the branches of the health service in accordance with logical priorities; (iv) in the same way, the financial resources for hospital in-patient treatment are to be allocated to the different types of hospital; (v) allocations to individual specialties and purposes can be determined only from the viewpoint of the whole service; and (vi) although expenditure on health is related to the gross national product the proportion could be raised from the existing 5 to 10 per cent to perhaps 10 to 15 per cent by expert 'marketing of the product'.

FINANCE

See also Abstract No. 755

812. MÜLLER, Hans-Werner. Fortschritt oder Rückschritt? Gedanken zur anstehended Novellierung des Krankenhaus-finanzierungsgesetzes—KHG. **[Progress or regression: thoughts on the impending revision of the Hospital Financing Act.]** *Krankenhaus*, Stuttgart, 1980, April, vol. 72, no. 4, pp. 107-110.

The proposed revision of the West German Hospital Financing Act is discussed. The principal aims of the revision are to improve planning and control in the hospital field; to give effective support to hospitals in their efforts to achieve the most efficient management possible; and to enhance autonomy among hospitals and thus strengthen the initiative of those immediately concerned with hospital affairs. The German Hospital Association does not consider that the proposed revision of the Act will be effective although there are some minor improvements.

813. BERMAN, Howard J. and WEEKS, Lewis E. **The financial management of hospitals.** 4th edition. Ann Arbor, Mich., Health Administration Press, 1979. xiii, 732pp. bibliog. ISBN 0 914904 33 7

The authors have attempted to revise and update the previous editions of this book to reflect the changing health care financial environment and to make it a more complete

and useful reference and teaching document. Statistical and financial data have been updated and a section added on Medicaid. Likewise, the bibliography has been updated and enlarged to reflect the growing body of literature and some abstracts are included. The book is in five sections: (i) introduction; (ii) sources of operating revenue; (iii) working capital management; (iv) planning, budgeting and control; and (v) future trends in hospital financing. There is a glossary and a list of addresses of publishers and sources (all American).

COSTS

See also Abstract Nos. 817, 825, 859

814. KARAS, Stephen. **Cost containment in emergency medicine.** *Journal of the American Medical Association*, Chicago, Ill., 1980, April 4, vol. 243, no. 13, pp. 1356-1359.

About 3,000 patients a month are treated in the emergency department at Tri-City Hospital, Oceanside, California. A cost data analysis using the department's microcomputer revealed that laboratory, radiology, pharmacy and supply charges accounted for 44 per cent of the total for a two-month period. Of the 1,560 different cost items, 100 accounted for 90.9 per cent of the total charges to patients. By further analysis and combining physician fees with other charges, a 50-item list of the highest-cost-items was developed. At sessions held to acquaint staff with the need for cost containment and to call attention to the posted list of the highest cost items, it was suggested that certain items on the list be ordered only after careful consideration of their usefulness. Discussions about the clinical usefulness of certain tests were augmented by staff participation and review of the literature. The cost containment efforts resulted in a 10.2 per cent reduction in laboratory and radiology charges and a 3.3 per cent total saving to patients.

HEALTH INSURANCE

815. WIMBERLEY, Terry. **Toward national health insurance in the United States: an historical outline, 1910-1979.** *Social Science and Medicine*, Oxford, 1980, March, vol. 14C, no. 1, pp. 13-25.

This paper analyses the legislative history of the movement towards national health insurance in the United States over the last 70 years. Five periods in this history are distinguished in terms of the value basis upon which legislation was proposed and of the decision-making theory used throughout the period in the provision of health care: 1919-1920, 1921-1933, 1933-1949, 1950-1974 and 1972-1979. The conclusions drawn are: (i) the bulk of the legislation has been polarized around two disparate value bases (total comprehensive and compulsory versus limited, mixed and voluntary) and two distinct decision theories (rationale versus incremental); (ii) Congress and administration have shown receptivity on a limited basis to a total comprehensive and compulsory approach in times of great socio-economic upheaval; (iii) in times of relative stability Congress and administration have favoured the other approach; (iv) as there have been more periods of stability, the present system of health care is a product of this approach; (v) as the percentage of federal dollars

spent on health care has grown from 4.3 in 1963 to 12.7 in 1978, the effectiveness of this approach is questionable; and (vi) it seemed unlikely therefore that the 96th Congress would respond favourably to the health care legislation proposed by Senator Edward Kennedy and the Committee for National Health Insurance.

HOSPITAL ACCOUNTING

See also Abstract No. 793

816. MÄGDEFRAU, Friedel. Die Entwicklung von Umlageschlüsseln, Methoden und Grenzen der Kostenspaltung bei der Anwendung der Betriebsabrechnung im Krankenhaus. **[The development of performance indicators, and the methods and limitations of costing in the use of commercial accounting in the hospital.]** *Krankenhaus-Umschau*, Kulmbach, 1980, March, vol. 49, no. 3, pp. 168-172.

The principles of commercial accounting and cost accounting, as applied to hospitals, are discussed and a number of examples are given of the way in which they highlight performance and make comparisons with other hospitals possible. A list is given of the main departments and heads of expenditure and the key figures which are needed to assess their performance.

817. THOMPSON, John D., AVERILL, Richard F. and FETTER, Robert B. **Planning, budgeting, and controlling—one look at the future: case-mix cost accounting.** *Health Services Research*, Chicago, Ill., 1979, vol. 14, no. 2, pp. 111-125.

Whatever may be the exact role of the United States government in controlling the costs of hospital care, it is clear that the government will substitute some form of prospective reimbursement for the present form of retrospectively adjusted payment based on 'reasonable cost'. Prospective reimbursement in any form requires the preparation of budgets which can provide comparisons between actual experience and projected estimates which are accurate enough to provide managerial control over costs and revenue. Many hospital managers cannot, at present, generate such a budget. This paper outlines a system for cost accounting and managerial control which is an extension of the usually accepted departmental costing systems and takes as its units the 383 diagnosis related groups considered to be the hospital's products. Such an approach offers a more powerful analytical, budgeting and cost-finding tool. It also offers the opportunity to involve the medical staff in issues related to the effect of their clinical practice patterns on hospital costs.

SUPPLIES AND STORES

SUPPLIES

818. SLOWIAK, Paul. **Million dollar annual savings in material management operations.** *Hospital Topics*, Sarasota, Fla., 1980, March/April, vol. 58, no. 2, pp. 46-49.

This paper describes how Cook County Hospital has reduced the costs of three

material management functions: laundry; central sterile supply department; and supply management. The emphasis has been on saving staff costs through organizational realignment, improved systems, increased productivity, and overall increased efficiency. After determining the need for each specific function in each department, the methods used were reviewed to ensure they were both efficient and economical. The output of each member of the staff was then measured to see if it was reasonable. A brief summary of the activities and actions taken in each of the three departments is presented. Annual savings achieved in the departments were: laundry, $564,000; central sterile supply department, $175,000; supply management, $441,000; total, $1,180,000.

CATERING, DIETETICS, KITCHENS

DIETETICS IN THE HOSPITAL

819. HEKKENS-KLAASSEN, Anneke and SWIERINGA, Joop. **Rationalisation of therapeutic diets in the Netherlands: dietetic applications and organizational application in hospitals.** *Journal of Human Nutrition*, London, 1980, April, vol. 34, no. 2, pp. 91-106.

In 1976 the Netherlands Education Bureau for Food and Nutrition instituted a project to rationalize therapeutic diets and reorganize hospital catering departments. A previous paper developed a logical and consistent range of concepts to name, specify and prescribe therapeutic diets. This paper describes the practical application of these concepts. The first part discusses the translation of diet prescriptions into actual foodstuffs, so that physicians, catering managers, cooks and, especially, dietitians can use the same language and symbols. The design of the diet should be attuned as much as possible to the eating habits of the patient concerned and can vary from one patient to another. The second part presents an organizational model for hospital catering designed so that patients on diets can themselves determine what and how much they wish to eat with the help of two essential documents: the diet prescription (reproduced) and the menu plan.

KITCHENS

820. AMELIN, M. R. La cuisine dans nos établissements. **[The kitchen in our organizations.]** *Hospitalisation Privée*, Paris, 1980, Feb., no. 200, pp. 26-29.

It is possible to operate an efficient catering service for a 100-bed establishment with a total staff of seven. The equipment required is simple and includes tables for serving, preparing, and clearing away, a preparation area with hot and cold water, two cookers with ovens and hotplates, a deep-fryer, a sink for vegetables, a vegetable-cleaning machine, a mixer, a ham-slicing machine, a dish-washer, and coffee mills. In the author's experience it is cheaper to have ready-cut meat delivered than to employ a full-time butcher. It is not necessary to have a qualified chef. The total cost of meals in the author's establishment is 100,000 francs for 6,000 meals a month, or 15 francs a meal.

821. Posch, P. Der Neubau der Zentralküche des LKH Klagenfurt. **[The new central kitchen at the Klagenfurt Provincial Hospital.]** *Österreichische Krankenhaus-Zeitung*, Wien, 1980, Jan., vol. 21, no. 1, pp. 39-42.

The new central kitchen at Klagenfurt Hospital, which came into full use in February 1979, serves not only the 2,000 bed hospital but also nursing homes, children's homes and hospital training schools. On average 2,800 breakfasts, 3,600 mid-day meals and 2,800 evening meals are served to patients and staff daily. The number of staff, including those distributing meals, is 132. The equipment described includes conventional utensils and machines as well as automatic equipment with a capacity of up to 3,000 portions an hour. An electronic weighing system has been installed. For patients in the main hospital a tray system is used, employing special heated transport trollies. The total cost, including fixed and mobile equipment, was 221m Austrian schillings (£7.5m).

CANTEENS, STAFF DINING-ROOMS

822. Dujardin, Juliette. Hygiène du restaurant et du matériel. **[Hygiene in restaurants and kitchens.]** *Argus des Collectivités*, Paris, 1980, April, no. 317, pp. 17-21.

The attention of catering managers is drawn to two recent studies on food poisoning in France, and practical advice is given on how best to avoid these unfortunate and sometimes fatal occurrences. Only persons whose appearance at interview is neat and tidy should be employed in kitchens; they are more likely to heed instructions on the subject of hygiene. Numerous washbasins should be provided for staff, not only beside the W.C. but also in the kitchen itself. Paper towels or a warm-air dryer (*not* a roller towel) should be available for them to dry their hands. They should wear special clothes at work and their changing-rooms should be sited at a distance from the kitchens. Floors should be cleaned with a detergent and disinfectant solution after each meal. A drain in the floor is very useful for this purpose. Cooker hoods should be washed once a week, and grills, frying pans, and tin-openers after use. The best way of keeping rodents, flies, and cockroaches at bay is to keep the kitchen spotlessly clean.

FOOD SERVICE

823. Maller, Owen, Dubose, Cynthia N. and Cradello, Armand V. **Consumer opinions of hospital food and foodservice.** *Journal of the American Dietetic Association*, Chicago, Ill., 1980, March, vol. 76, no. 3, pp. 236-242.

Opinions of hospital catering were sought in five United States Army hospitals from 544 patients eating in their rooms, 129 ambulatory patients eating in the hospital dining room, and 924 staff eating in the hospital dining room. The questionnaire used covered: appearance of food served; aroma of food; cleanliness of dishes and silverware; attractiveness of dishes, silverware and tray; size of portions; thoroughness of cooking vegetables; seasoning of food; whether hot food items were at the temperature the patient liked when he ate them; whether cold foods were at the temperature

the patient liked when he ate them; and tenderness of meat. Among the conclusions drawn from the results are: (i) younger patients and staff were more critical; (ii) long-stay patients were less enthusiastic about hospital food; (iii) those eating on the wards had more favourable opinions than those eating in dining rooms; (iv) mood, staff's job satisfaction, and patients' satisfaction with medical care were all significantly correlated with ratings of catering; (v) type of diet had no effect on ratings; and (vi) 20 per cent of patients supplemented their meals in some way.

HYGIENE IN THE HOSPITAL KITCHEN

See also Abstract No. 822

824. HAVERGAL, Margaret. **Paper's germ cure.** *Cleaning Maintenance and Big Building Management*, Watford, 1980, May, p. 21.

The Grampian Health Board has carried out a six-month pilot scheme in which two types of paper tea-towel were compared with traditional tea-towels and with each other. The ward kitchens chosen for the trial fell into three categories: with dishwashing/drying machines, with sterilizing sinks, and with ordinary sinks. Two types of paper were used: white paper roll, 18 inches wide, quality 5013, 235 feet long; and green paper roll, 18 inches wide, quality R101, 2,076 feet long. Use of both types of roll was higher in wards without either a sterilizing sink or a dishwashing machine, but in one area with a machine. Consumption was found to be much higher than expected because it was used to cover trays and trolleys of crockery or food. The specialty of the ward did not affect the amount of paper used. All domestic staff preferred to use linen tea-towels, but with explanation most accepted paper. One case of eight or nine rolls lasted for a fortnight and a single case could be stored fairly easily. Disposal presented no problem. Set against the cost of laundering, the paper towels would save £2,683 per year. Air studies showed three times as many bacteria in the air of kitchens using linen as in those using paper. Samples from linen towels yielded several types of bacteria.

LAUNDRIES AND LINEN SERVICE

LAUNDRIES

See also Abstract No. 834

825. HÜBNER, Heinz Wolfgang. Betriebsvergleich: Überlegene Wirtschaftlichkeit der Grosswäschereien. **[Working comparisons: more efficiency with large laundries.]** *Krankenhaus*, Stuttgart, 1980, March, vol. 72, no. 3, pp. 71-77.

This paper presents a detailed analysis of an enquiry carried out by the Laundries Committee of the Association of Chief Administrators of German Hospitals into hospital costs. The number of hospitals co-operating in 1978 was 291, divided into five groups according to tonnage of laundry per year. The results are set out in a series

of nine statistical tables. The conclusion drawn is that the cost per tonne is higher in small and medium sized hospital laundries than in large ones. There is a tendency for more small hospitals to use commercial laundries or to co-operate with other hospitals in a joint laundry. A plea is entered for fine-tuning of laundry cost accounting so that more detail is given of the individual processes.

HOSPITAL DOMESTIC MANAGEMENT

DOMESTIC WORK

See also Abstract Nos. 827, 828

826. FERRARI, Pio Vittorio. Aspetti tecnici, economici ed ecologici della detergenza delle comunità ospedaliere. **[Technical, economic and environmental aspects of cleaning in hospitals.]** *Tecnica e Metodologia Economale*, Firenze, 1980, Jan./Feb., vol. 19, no. 1, pp. 22-24, 26, 27, 30, 31, 33, 34.

The author deplores the lack of scientifically based standards and criteria for cleaning in Italian hospitals. He proposes a comprehensive cleaning plan, under ten headings: (i) dirt: microscopic and chemical study, composition, classification, interactions with soiled objects, interactions with cleaning materials; (ii) objects to be cleaned—nature, forms, structure, surfaces, condition; (iii) cleaning processes—choice of process, formulae for cleaning and washing; (iv) study, choice, use, and maintenance of cleaning equipment; (v and vi) monitoring of the short and mediur.-term results of cleaning; (vii) monitoring of waste water, gases, and fumes; (viii) training of staff at all levels; (ix) research and keeping up-to-date with scientific and technological advances; and (x) legislation, prevention of accidents, the establishment of standards, and research. A scheme of this kind could be put into operation gradually without any massive initial expenditure. The most urgent items are numbers (viii) and (ix).

HYGIENE IN THE HOSPITAL

827. DOSCH, F. and GAJDOSIK, L. Sinn und Zweck der Richtlinie für Desinfektionsmittel-Dosierapparate. **[Significance and aims of the guidelines on dosage apparatus for disinfectants.]** *Österreichische Krankenhaus-Zeitung*, Wien, 1980, April, vol. 21, no. 4, pp. 204, 205, 207.

Austrian legislation lays down the responsibility of the medical staff for adequate disinfection as a prevention measure in the hospital. Routine measures are in the hands of the hospital hygienist. Dosage equipment should undergo acceptance tests and its functioning should be tested at least once a year. The guidelines on disinfection have the following objectives: to provide an optimal standard of hygiene for the patient; to provide test criteria for the hospital hygienist; to give guidance to the hospital authority on the purchase and management of dosage equipment; to lay down technical and functional requirements for the producer; and to help all those interested who are in need of guidance.

828. FRIEBES, A. and DOSCH, F. Richtlinie der Österreichischen Gesellschaft für Hygiene, Mikrobiologie und Präventivmedizine (ÖGHMP) für Apparate zur automatischen Dosierung flüssiger chemischer Desinfektionsmittel. **[Guidelines of the Austrian Society for Hygiene, Microbiology and Preventive Medicine for automatic dosage of chemical disinfectants in fluid form.]** *Österreichische Krankenhaus-Zeitung*, Wien, 1980, April, vol. 21, no. 4, pp. 201, 203, 204.

These guidelines were prepared jointly by the Austrian Weights and Measures Office and the Austrian Society for Hygiene, Microbiology and Preventive Medicine. They correspond roughly, but with some differences, to the West German guidelines published in 1978. They are applicable to apparatus for producing accurate dosage of fluid chemical disinfectants. The detailed recommendations are set out under two main heads: requirements for the disinfectants to be used; and requirements for apparatus for the automatic preparation of the prescribed dilutions of fluid chemical disinfectants.

PREVENTION AND CONTROL

See also Abstract Nos. 822, 824, 892

829. HOWIE, J. W. and COLLINS, C. H. **The Howie Code for preventing infection in clinical laboratories: comments on some general criticisms and specific complaints.** *British Medical Journal*, London, 1980, April 19, vol. 280, no. 6221, pp. 1071-1074.

The report of the working party to formulate a code of practice for preventing infection in clinical laboratories and postmortem rooms was completed in 1978. This paper first outlines the background to the code and summarizes its mandatory provisions and the other recommendations of the working party. It then discusses some general criticisms concerning the need for and desirability of having a code. Finally some specific complaints about the code are answered. They are concerned with: (i) difficulty in securing copies of the printed code; (ii) composition of the working party; (iii) its confinement to microbiological hazards; (iv) the list of pathogens in category A; (v) the relative importance of tuberculosis and hepatitis; (vi) the inclusion of *Salmonella typhi* in category B; (vii) decontamination of centrifuges; (viii) use of the Coulter counter and automated chemistry equipment; and (ix) the requirement to carry medical contact (not ID) cards. It was never intended that the code should be the final word, and it is hoped that it will be properly assessed in practice. In the meantime it is a fair summary of what current experience has deemed to be reasonably practical.

830. GRAY, Miriam J. **The challenge of infection control.** *Hospital Topics*, Sarasota, Fla., 1980, March/April, vol. 58, no. 2, pp. 21, 22.

The history of hospital infection and its control is outlined. Six factors essential to the infection process are identified: causative agent; source or reservoir; mode of escape; mode of transmission; mode of entry; and susceptible host. The chain of infection can be broken by: (i) rapid accurate identification of the causative agent; (ii) staff health programmes, environmental sanitation, disinfection and/or sterilization to eliminate the reservoir; (iii) proper attire, handwashing, control of excretions and secretions and waste disposal to eliminate the portal exit; (iv) isolation, proper food

handling, airflow control, sterilization and handwashing to prevent transmission; (v) aseptic technique, catheter care and wound care to block the portal of entry; and (vi) recognition of high-risk patients and treatment of underlying diseases to reduce the number of susceptible hosts. The major factor in breaking the chain is the involvement of all levels of staff in carrying out these measures.

831. HOET, T. La prevéntion en matière de'aérobiocontamination en salle d'opération. **[Prevention of air-borne contamination in operating theatres.]** *Hópital Belge*, Bruxelles, 1980, Jan./Feb., vol. 23, no. 143, pp. 15-29.

Airborne contamination of surgical wounds may be caused by: (i) the air entering the theatre through the ventilation system; (ii) air entering the theatre through doors and entrances; (iii) the generation of particles within the theatre itself; and (iv) the introduction of contamination when compressed air is used. The author examines methods of preventing each of these modes of contamination in turn. Amongst the methods are: filters, graduated atmospheric pressure systems, special clothing for theatre staff, the use of non-woven materials, different types of air flow systems, the recycling of theatre air, the 'diving suit', and methods of cleaning the theatre. The article contains 13 illustrations, five tables, and a bibliography of 29 references.

832. MCGOWAN, J. E. and others. **Nosocomial infections with gentamicin-resistant** *staphylococcus aureus:* plasmid analysis as an epidemiologic tool. *Journal of Infectious Diseases*, Chicago, Ill., 1979, Dec., vol. 140, no. 6, pp. 864-872.

Infection with strains of *staphylococcus aureus* resistant to gentamicin (SARG) was identified in 22 infants in the special care nursery at Grady Memorial Hospital, Atlanta, Georgia, between October 1976 and August 1977. Infection with SARG also occurred in 20 adults in surgical and medical wards and 12 patients in the burn unit. Patients who had been infected more frequently with SARG had been treated with gentamicin and had been in hospital longer than patients infected with strains of *staphylococcus aureus* susceptible to gentamicin. However, sites of infection and the areas of the hospital involved were similar for the two groups. Isolates of two different phage types had the same pattern of antibiotic resistance. Five isolates of two phage types were analyzed for plasmial content and the plasmids were then analyzed by endonuclease digestion. Two isolates contained identical plasmids and certain characteristics seemed to be common between plasmids of isolates from patients in different parts of the hospital at different times. Thus, spread of resistance probably involved dissemination of a single plasmid among different isolates and spread of multiple plasmids containing the same type of resistance.

HYGIENE IN THE OPERATING THEATRE

See Abstract Nos. 771, 831

STERILIZATION

833. DEPARTMENT OF HEALTH AND SOCIAL SECURITY and WELSH OFFICE. **Sterilizers.** London, HMSO, 1980. 82pp, bibliog. (Health Technical Memorandum No. 10) ISBN 011 320458 2 £7.50

This memorandum gives guidance to hospital authorities in respect of the choice,

purchase, installation, testing and commissioning, use and maintenance of steam sterilizers used for porous loads, fluids in sealed containers and unwrapped instruments and utensils. Similar guidance is given on electrically heated sterilizing ovens (hot air sterilizers) but other types are not covered.

AIR HYGIENE

See Abstract No. 831

DISPOSAL OF WASTE

See also Abstract No. 769

834. ZAMUNDER, N. and CAMPAGNOLA, G. Le grandi reti sanitarie di tubazioni per il transporto di solidi. **[Large sanitary piping networks for the transport of solids.]** *Tecnica Ospedaliera*, Milan, 1980, Feb., vol. 10, no. 2, pp. 60-65.

This is an introduction to the use of a system of steel piping in a comparatively new field—the pneumatic transport of solid refuse or soiled linen. The system consists of horizontal collectors, made of steel piping, 400-600 mm in diameter, which run parallel to the piping for the other general services (water, gas, etc.) and are connected to the vertical chutes by an automatically controlled guillotine valve. A 'cyclone' unit separates the load from the air which carried it, and there are a series of filters for the filtration, sterilization, and deodorizing of the air. The advantages of the system are hygiene, automation, quietness, speed, and economy. This description is amply illustrated and there is also a graph in which costs are compared with those of a traditional system.

835. PAYNE, Rolf. **Blocking problems in hospital drainage systems.** *Plumbing*, Hornchurch, 1980, vol. 5, no. 1, pp. 26-28.

This is a paper on drainage problems in hospital buildings given at a recent conference organized by the Institute of Building in Scotland. The following suggestions are made: (i) pipes and fittings must be of smooth material without rough edges and protusions; (ii) only large radius bends and junctions truly oblique to the direction of flow should be used; and (iii) all joints between components in the system must be to engineering tolerances. Automatic warning devices are particularly important in hospitals, where blockages might cause pathogenic or corrosive sewage to spill into clinical areas. The author recommends replacement of paper towels by hot air hand driers and an increase in the water consumption of bedpan disposal units. Lastly, a programme of planned maintenance should be introduced.

SAFETY MEASURES

836. CONFEDERATION OF HEALTH SERVICE EMPLOYEES. SCOTLAND. **Health, safety and welfare at work: a handbook for safety representatives of the Confederation of Health Service Employees.** Lesmahagow, Confederation of Health Service Employees, [Scottish Region], 1980. iv, 33pp.

One half of hospital beds in Scotland are in buildings constructed before 1900;

amongst the faults found in a survey were collapsed ceilings, electrical hazards and poor heating, lighting and ventilation. Considerable fire risks were found, particularly in psychiatric and geriatric hospitals, a situation made worse by low staffing levels—which were also producing both physical and emotional stress. The union report criticizes poor management safety organization and a lack of care and information in dealing with dangerous substances.

FIRES AND FIRE PREVENTION

837. GRIMSGAARD, Øivind H. Brann: idag i fokus: hotelbrannlovens virkninger på de nyere norske sykehus. 1980—quo vadis? **[Fire, today in focus: effects of the hotel fire legislation on newer Norwegian hospitals. 1980—where to now?]** *Sykehuset*, Oslo, 1980, vol. 43, no. 3, pp. 143-153.

The author outlines the background to the recent stringent fire regulations for hotels in Norway, and discusses the impact of this legislation on hospitals. He suggests that there may be too much protection against fire and not enough against smoke. There is a need for more research and creative thinking on this problem. His article is illustrated with seven photographs of fire doors, including two of the 'horizontal guillotine' which can be slid over a conventional wood and glass door in the event of fire.

838. GREENWOOD, T. **Health buildings—fire precautions.** *Hospital Engineering*, London, 1980, April, vol. 34, no. 3, pp. 14-15.

This paper discusses a draft Home Office guide on fire precautions in existing hospitals. If a designating order is made under the Fire Precautions Act 1971 in respect of patient areas of hospitals, a guide will be published in two parts: (i) the Act as it applies to hospitals; and (ii) fire precautions in hospital premises. After outlining the principles adopted in preparing the draft, this paper discusses briefly the advice on surface linings, means of escape, protected areas, distance of travel in other areas, fire separation, stairway separation, unorthodox means of escape, fastenings on doors, fire/smoke spread, furniture and fittings, fire warning systems, and types of automatic detection.

THE PATIENT

WELFARE OF THE PATIENT

See also Abstract Nos. 780, 784, 790, 802, 823, 849, 871, 874, 875, 880, 890, 894

839. SAHL, R. J. Patient und Krankenhausumwelt. **[The patient and the hospital environment.]** *Krankenhaus*, Stuttgart, 1980, March, vol. 72, no. 3, supplement; pp. 1-12.

It is important that the modern hospital, with its developments in the fields of rationalization, technology and automation, does not neglect the patient and his basic needs. These needs can be grouped under three heads: (i) accommodation (admission, reception, wards, patients' rooms, examination and treatment areas,

general arrangements for patient care); (ii) experiences (first contacts and impressions, acclimatization, daily routines, crises and dying, recovery); and (iii) contacts (with nurses, doctors, medical technicians, general care, social and pastoral care, visiting). The ways in which the hospital should provide proper care for the patient in all these respects are set out in a series of 30 'theses'. There is also an extensive list of 244 references to the relevant world literature.

840. NORDHOLM, L. A. **Beautiful patients are good patients: evidence for the physical attractiveness stereotype in first impressions of patients.** *Social Science and Medicine*, Oxford, 1980, Jan., vol. 14A, no. 1, pp. 81-83.

To determine how physical attractiveness in patients influences first impressions, 289 subjects working in the health professions reacted to a set of eight photographs of persons varying in age, sex and physical attractiveness. Each subject recorded their impressions of a single photograph on 15 graduated lists of comments, the positive end being assigned the value seven and the negative end the value one. The results indicated that attractive persons were rated more favourably than unattractive persons on 12 of 15 personality characteristics. These findings show that attractive patients are generally considered to be more friendly, less complaining and more intelligent. The extent to which this stereotype applies to treatment and to the patients' impressions of health care professionals needs to be investigated.

841. HUGHES, Dolores T. **Successful planning and implementation of a hospital-based community self-help group.** *Hospital Topics*, Sarasota, Fla., 1980, March/April, vol. 58, no. 2, pp. 25-27.

A series of interviews with discharged heart disease patients revealed a lack of knowledge and understanding of the heart disease process and aspects of preventive care. As a result a community cardiac education programme was established at Thomas Jefferson University Hospital, Philadelphia. The purpose, goals and specific objectives of the programme are outlined. The success of the programme depends on: (i) a creative group leader; (ii) a convenient and comfortable setting; (iii) effective publicity; (iv) flexibility of the programme; (v) availability of programme expenses; and (vi) availability of consultants. The nine sessions are: (i) introduction; (ii) anatomy and physiology of the heart; (iii) and (iv) diet therapy in heart disease; (v) hypertension; (vi) additional risk factors in heart disease; (vii) coping and adapting to illness and disease; (viii) cardiopulmonary resuscitation; and (ix) evaluation. Testing of the programme has indicated that it increases public awareness of the disease, high risk factors, and therapeutic regimens. It is planned to introduce programmes for other diseases.

842. DEVNEY, Anne M. **Bridging the gap between inhospital and outpatient care.** *American Journal of Nursing*, New York, 1980, March, vol. 80, no. 3, pp. 446-449.

The in-patient cardiac rehabilitation programme at the Naval Regional Medical Center, San Diego, California, provides a basic 12-day plan for exercise and patient education for patients with uncomplicated myocardial infarction. The patient can expect to be in a chair any time between day two and day six, and from day five, when cardiac monitoring ceases, is allowed to walk round the bed. Full ward activity is allowed on day nine in preparation for discharge on day 11 or 12. Several forms are

used to keep a record of the patient's needs and progress. Some of these forms are shown to patients to help with a self-care programme aimed at preventing a second infarction. Informal ward classes, which include members of the patient's family and allow for discussion, cover such matters as basic facts about the heart, the actions of some cardiac drugs and how to count the pulse. Of two more formal classes, one covers suitable diet and activity, and the other describes the cardiac rehabilitation out-patient clinic, thus providing a link between in-patient and out-patient care. A discharge interview explains the importance of post discharge care. A form giving the most important facts about the patient's stay is given by the patient to the out-patient clinic to provide a further link.

843. SCHULMAN, Beryl A. and SWAIN, Mary Ann. **Active patient orientation.** *Patient Counselling and Health Education*, Princeton, N.J., 1980, vol. 2, no. 1, pp. 32-37.

The successful treatment of chronic ambulatory illness requires that patients be involved actively in the management of their own conditions. How health providers orient services towards patients is likely to affect the quality of patients' involvement. In the study reported here, 91 hypertensive patients were assigned randomly among three programmes: (i) routine clinic care on the traditional model with the patient as passive recipient of care; (ii) patient education, with patients being given five instructional booklets about hypertension and its management while receiving routine clinic care; and (iii) contingency contracting with patients receiving routine care and instructional booklets and, in addition, writing contracts to perform selected health behaviours in exchange for desired rewards. The patients rated their care in terms of active patient orientation (APO). Compared with patients in the other two groups, patients in the contingency contracting group rated their care significantly higher on APO. These findings are in accord with expectations based on the designs of the three programmes of care.

THE GENERAL PRACTITIONER AND HIS PATIENTS

844. SADLER, Georgia Robins and WARBURTON, S. W. **Expanded hospital role for family physicians.** *Hospital Topics*, Sarasota, Fla., 1980, March/April, vol. 58, no. 2, pp. 15-17.

A recent survey of the hospital privileges of family physicians in New Jersey, together with results of other recent surveys, strongly contradicts the belief that those privileges are diminishing. Of the 98 acute general hospitals in New Jersey, all but two admit family physicians to their staff. They are functioning as: (i) the deliverer and co-ordinator of medical services of their patients and their families; (ii) the educator who sees that the patient, family and subspecialist have the information necessary to function efficiently; and (iii) the patients' counsellor and guide in the medical and personal decision-making processes. A number of mechanisms were identified for assessing the clinical capacity of family physicians seeking hospital privileges. It is recommended that in addition to assessing traditional medical skills, these hospitals give attention to the importance of adding to their staff family physicians with good interactive skills. Family physicians should be involved in the development of criteria to establish eligibility for hospital privileges.

HOSPITAL CARE

See also Abstract Nos. 787-789, 863, 864, 870, 873, 876, 895

845. PEDERSEN, H. Interaktion med patienten—et vigtigt led i den psykiske pleje: psykisk pleje kan genskabe sygeplejerskens faglige identitet. **[Interaction with patients—an important link in care: psychological nursing can change the nurse's professional identity.]** *Sygeplejersken*, København, 1980, April 16, no. 15, pp. 30-35.

In the intensive care unit the nurse generally derives more prestige from her technical role than from her 'care' role, in particular when the patient is unconscious or under intubation and therefore incapable of communication. The author describes modes of interaction between the nurse and the intubated patient: verbal communication, non-verbal communication (gestures, smiles, eye contact), and special, non-personal communication (radio and television). He describes three phases in the patient's recovery: on admission the patient is unconscious, confused, and very weak; then he is conscious, less weak, but cannot communicate, even in writing; and finally he is conscious, still less weak, and can communicate through writing. The nurse's interactions with the patient are an important aid towards his recovery. It is the care role which distinguishes the nurse from the technician or the secretary and gives her a professional identity.

846. WYANT, Gordon M. **The pharmacology of chronic pain.** *Canadian Journal of Hospital Pharmacy*, Saskatoon, Sask., 1980, Jan./Feb., vol. 33, no. 1, pp. 9-11.

Chronic pain is either malignant or benign, the latter being either organic, psychogenic or physiological. The methods of treatment of chronic pain are different from that of acute pain and the aims of treatment include: (i) prevention, by administering a drug before a bout of pain occurs; (ii) ease of administration; (iii) retention of alertness in the patient; (iv) patient co-operation in treatment; (v) avoidance of addiction; and (vi) the achievement of minimal side effects. The use of the following groups of drugs in the treatment of chronic pain is discussed; (i) narcotic analgesics for malignant pain; (ii) non-narcotic analgesics, most useful for mild to moderate pain; (iii) anti-depressants; (iv) non-steroidal anti-inflammatory agents for musculoskeletal pain; (v) anticephalics, especially for headaches; (vi) anxiolytics; (vii) antispasmodics; and (viii) anti-emetics to control side effects such as vomiting caused by some drugs. The use of tables of drug equivalents may reduce the number of narcotics taken over a long period. The treatment of chronic pain is a new field and many future changes can be expected.

847. RIVARD-GAUTHIER, Jeanne. Composantes d'un programme de contrôle de la qualité des soins. **[Elements in a quality control programme.]** *Administration Hospitalière et Sociale*, Montreal, Que., 1980, Jan./Feb., vol. 16, no. 1, pp. 35-37.

The objectives of a quality of care monitoring programme are: (i) to improve the efficiency and effectiveness of nursing services and nursing care; (ii) to maintain or improve quality; (iii) to provide the authorities with the means of correcting unsatisfactory situations; and (iv) to improve the validity and reliability of instruments, techniques, and methods. In the USA, three major monitoring programmes have been

developed: by Benedikter, by the Joint Commission on Accreditation of Hospitals, and by Phaneuf. The author outlines these systems and suggests that what has been done in the USA could be adapted to Canadian needs.

848. VERZELLENBERG, L. N. J. Kwaliteit doelmatigheid in de gezondheidszorg: een bedrijfskundige beschouwing. **[Quality and efficiency in health care: an operational research study.]** *Ziekenhuis*, Utrecht, 1980, March 19, vol. 10, no. 6, pp. 168-170.

This paper considers the concepts of quality and efficiency as applied in industry and their possible applications in health care. Product quality is the degree to which the product satisfies the customer which can be compared to the extent to which an acceptable level of health is achieved. Process quality concerns the quality of workers, tools, etc. and in hospitals this could refer to staff training or the sterilization of instruments, for example. Provision quality concerns working conditions, such as theatre layout. In health care, quality is paramount and alternatives must be compared. The aim is for best results with the least resources. Improvement of quality and efficiency can, however, produce two opposite effects: (i) increases in health care costs as new needs arise; or (ii) reductions in costs as new methods eliminate superfluous work. All terms are explained in detail and illustrated with examples.

849. JANKOWSKI, R. F. and others. **Patients' expectations of health care: fulfilled and unfulfilled.** *Practitioner*, London, 1980, April, vol. 224, no. 1342, pp. 351-353.

During the technological and pharmacological revolution in medicine in the last 50 years, interest has centred on the available resources and the delivery of care rather than on the expectations of the patients. The study reported here involved 82 patients with 'classical' or 'definite' rheumatoid arthritis referred to the Centre for Rheumatic Diseases, Glasgow, by their own general practitioners. The results showed that more patients received drugs, surgery and physiotherapy than had expected them. Only 19 per cent expected either to remain unchanged or deteriorate, but in fact 32 per cent did so. Little or no information was given to 90 per cent of the patients by their general practitioners. It is encouraging that 65 per cent of patients were improved by clinic attendance, 47 per cent considering themselves to have benefited considerably. Only one-third of patients cited the success of drugs or surgery as their main reasons for satisfaction. An equal number gave the information they gleaned as the main reason for their satisfaction.

TERMINAL CARE

See also Abstract No. 880

850. WALD, Florence S., FOSTER, Zelda and WALD, Henry J. **The hospice movement as a health care reform.** *Nursing Outlook*, New York, 1980, March, vol. 28, no. 3, pp. 173-178.

The rapid development and expansion of the hospice movement is outlined. It is now broadly conceived as providing a kind of care for the terminally ill and their families. Five forms of hospice care have now evolved: home care services; hospice teams in hospitals; palliative care units in hospitals; hospices affiliated to hospitals; and completely autonomous hospices. Despite its enthusiastic endorsement and rapid

spread, the movement is not without its personal, professional, philosophical and political problems and has now reached a critical stage. The hospice concept needs a solid base before it can be integrated into the established health care system. Time is also needed to gather facts, consider and test alternative plans, and establish a sense of community within each setting. Hospice practitioners risk being distracted by the vast army of enthusiasts who have been drawn to the movement. The movement must also contend with the inertia of existing institutions. Finally, a balance must be struck between the ideals of the reform, on the one hand, and political and economic realities, on the other, since the way the reform is eventually integrated into the health care system will determine its ultimate scope, quality and longevity.

SPECIAL DEPARTMENTS

WARDS

See Abstract No. 774

OPERATING SUITES

See Abstract Nos. 771, 831

ANAESTHESIA

See also Abstract No. 889

851. DAVENPORT, H. T. and others. **Occupational exposure to anaesthetics in 20 hospitals.** *Anaesthesia*, Oxford, 1980, April, vol. 35, no. 4, pp. 354-359.

The nitrous oxide and halothane contamination in the inspired air of anaesthetists and in the atmosphere of operating theatres, anaesthetic rooms and recovery rooms were measured during normal working sessions in 20 different hospitals. An integrated personal sampling device was used. The nitrous oxide and halothane levels ranged from 10 to 3,000 ppm in the different areas with an average of 388.5 ppm, for the inspired air of anaesthetists during two hour periods. There was no correlation between the levels of ambient anaesthetic concentrations and the types of room ventilation and the differences in levels appeared to be due to a wide variation in work practices and techniques. Thus it is misleading to assess anesthetists' exposure to contamination by collecting ambient air samples in operating rooms. However, the personal sampling in this study demonstrated that active scavenging significantly reduced the nitrous oxide levels in the anaesthetists' area. Such a system will be effective in most hospitals.

PHARMACY

See also Abstract Nos. 797, 846

852. SMITH, Mickey C. and BROWN, Thomas R., editors. **Handbook of institutional pharmacy practice.** Baltimore, Md., Williams & Wilkins, 1979. xxi, 693pp. ISBN 0 683 07884 4 $30.75

This handbook is a large volume, compiled with the assistance of the American

Society of Hospital Pharmacists. There are seven sections covering: administration and management; drug information and drug actions; product formulation, packaging and distribution; research; patient-oriented services; educational activities; and quality assurance. The first section is merely an overview, whilst the last part covers a wide range of special topics such as disaster plans and ambulatory pharmacy services. There is a selective bibliography, and lists of references are given after several chapters.

853. BACHYNSKY, John A. **Hospital pharmacy in Canada.** *American Journal of Hospital Pharmacy*, Washington, D.C., 1980, April, vol. 37, no. 4, pp. 501-504.

Although hospital history in Canada is long and interesting, developments of current significance in hospital pharmacy only extend back to the scientific and commercial developments since about 1950. Most hospitals are independent institutions, but revenue is almost wholly derived from the provincial hospital insurance agency. Largely because of line-item budget allocations and a bureaucratic tendency to equalize services for the whole population, funds for existing pharmaceutical services have been assured, but the introduction of upgraded or innovative programmes has been difficult to achieve. The result has been an even quality of health care services, including pharmacy, throughout the country and a deficiency in clinical pharmacy programmes and the trained staff to run them. The last decade has brought advances, however, as allocation methods have changed and both hospital and insurance administrators have recognized the benefits to patients and the cost-effectiveness of many of the newer pharmacy programmes. The main challenges facing Canadian hospital pharmacy are to upgrade clinical services and education and to improve managerial and bureaucratic competence among pharmacy directors.

854. GUEST, K. and others. **Drug assay services and therapeutic drug use in a general hospital.** *Medical Journal of Australia*, Glebe, N.S.W., 1980, Feb. 23, no. 4, pp. 167-170.

Drug assay techniques were introduced at the Alfred Hospital, Melbourne, as part of the development of a reference toxicology service, and further development took place without parallel development of clinical liaison services. These circumstances provided an unusual study environment, allowing audit of drug use without introducing obvious bias to therapy in progress. Study drugs were prescribed to 1,586 patients from a total of 5,921 admitted to medical and surgical units during the study. Assays were performed on 786 samples drawn from 538 (34 per cent) of these patients. Drug use appeared to be suboptimal, as 60 per cent of the overall assay results were demonstrated to be outside the therapeutic range. However, repeat assays were performed in only 56 (12 per cent) of those instances in which assay results were above or below the therapeutic range, and successful dosage adjustments were made in only 22 (39 per cent) of the cases reassayed. The results indicated that: (i) the drug assay services were used inefficiently, and were not used consistently to guide drug use; (ii) the delivery of drug-related health care could be improved in consequence; and (iii) significant cost savings were possible if drug use was improved. Consultative services and educational efforts related to drug use within the hospital appear to be indicated.

855. VEDER-SMIT, E., NIEUWEHUIS, J. L. M. and BEYSENS, A. J. M. M. De functie van de ziekenhuisapotheker. **[The function of the hospital pharmacist.]** *Ziekenhuis*, Utrecht, 1980, April 2, vol. 10, no. 7, pp. 186-191.

The paper is a summary of speeches given at the fifth anniversary of the Netherlands Association of Hospital Pharmacists. The role of the hospital pharmacist is expanding from preparation and dispensing to distribution and pharmo-therapeutic control. Additional training for the required qualifications for pharmacists is suggested, with legal recognition and registration of hospital pharmacy as a specialty. Under present law responsibility for distribution and storage of medicines rests with the hospital authorities. The introduction of a medicine index and the setting up of a commission for medicine distribution are recommended. Dispensing for individual patients in hospitals should continue with the pharmacist in an advisory capacity to medical and nursing staff, but in control of instructions accompanying the medicines, and in personal contact with the patient. For efficiency and to keep down costs whilst increasing safety, unit dosages should be produced, labelled with name of medicine and instructions. A uniform standard of automation in drug control should be adopted for all hospitals to facilitate exchange of data and avoid duplication of work. Hospitals should work in co-operation with outside pharmacists to continue therapy through them after a patient has left the hospital. The paper includes five photographs.

LABORATORIES

See Abstract No. 829

BLOOD TRANSFUSION DEPARTMENT

856. **A life might depend on it.** *Refrigeration and Air Conditioning*, Croydon, 1980, April, vol. 83, no. 985, pp. 35, 36, 38.

The preservation of blood by refrigeration became a practical proposition in the early 1950s. Since then the use of this preservation method has become commonplace and diverse. The principles of blood refrigeration are outlined. Eight criticisms of existing equipment are listed. Some of these would be overcome if the equipment complied with the current British Standard BS 4376: 1968. Manufacturers' answers to some of the criticisms are presented. It would seem that there should be greater awareness on the part of buyers of what equipment is on the market, a greater awareness on the part of manufacturers of what the medical profession needs, and greater co-operation all round. The present British Standard is being revised.

DIAGNOSTIC X-RAY DEPARTMENT

See also Abstract No. 798

857. DIRICHLET, G. L. and others. EDV-Anlagen in der nuklearmedizinischen Diagnostik. **[Electronic data processing installations in nuclear medicine diagnosis.]** *Krankenhaus*, Stuttgart, 1980, March, vol. 72, no. 3, pp. 86-100.

This detailed account of the use of electronic data processing in diagnosis by nuclear

medical procedures is based on experience at the Rudolf Virchow Hospital, Berlin, where facilities for its use had been developed by 1977. The subject is dealt with under the following heads: state of knowledge, initial problems and methods used; evaluation of performance statistics; inventory; observations at centres for nuclear medicine; discussions with medical and technical staff; sound technology; technology of electro-installations; air-conditioning; and structural requirements.

858. JEANS, W. D., DANTON, R. M. and KILBURN, A. R. D. **An assessment of a computerized reporting system [SIREP].** *British Journal of Radiology*, London, 1980, May, vol. 53, no. 629, pp. 421-427.

A prototype computerized radiological reporting system (SIREP) developed at Johns Hopkins Hospital, Baltimore, is operated by a radiologist who signals to a computer by touching a glass surface on to which is projected the image of one of 165 slides, each containing words and phrases relevant to the radiographs to be reported. The report is shown on a television screen and is typed automatically when completed. The system was installed in the X-ray department serving the accident and emergency service at Bristol Royal Infirmary after a study had been made of the reporting sequences and times using conventional methods. Because there is no storage or analysis of the reports, the system directly affected only the radiologist and the secretary. For an average of 100 reports daily, it is calculated that the secretary would be saved 64 minutes of typing daily, and that a radiologist would take 63 minutes longer. In general, the system was mechanically reliable and fast in operation, with a maximum slide transit time of three seconds. All radiologists found the operating terminal simple to operate, but found that reporting abnormalities caused an increased effort and took longer. None of the radiologists would use the machine in preference to traditional methods and in Britain no cost or time benefit could be established.

RADIOTHERAPY DEPARTMENT

859. Wirtschaftliche Aspekte der Strahlentherapie. **[Economic aspects of radiotherapy.]** *Krankenhaus*, Stuttgart, 1980, April, vol. 72, no. 4, pp. 114-116.

This is a summary of the proceedings of a symposium on radiotherapy held in Berlin in February 1980. It is estimated that there are 3,700 new cases of cancer per million inhabitants in Western Germany each year. About 60 per cent of these new cases are given radiotherapy and one cancer radiotherapy is needed for about 500,000 inhabitants. In December 1970 there were 203 cobalt machines, 36 cyclotrons and 42 linear accelerators in use. The varying needs for each type are discussed.

860. WORLD HEALTH ORGANIZATION. **Optimization of radiotherapy: report of a WHO meeting of investigators.** Geneva, WHO, 1980. 89pp. (Technical Report Series 644) ISBN 92 4 120644 6 Sw.fr.6.00

The World Health Organization organized a conference on radiotherapy in 1978. This resultant report provides general guidance for planning and implementing radiotherapy services, particularly in developing countries. The meeting considered the main use of radiotherapy to be in cancer control although some applications for

benign diseases (e.g. keloids in Africa) are still justified. Patterns of cancer treatment were found to vary considerably, even in developed countries, and some countries lacked proper registration of cases. In certain developing countries patients appeared particularly sensitive to side-effects of chemotherapy with radiotherapy owing to poor nutritional status, and hereditary, immunological, climatic and environmental factors. The report covers equipment and dosimetry, optimization of biological responses to radiotherapy, and the optimization of treatment regimes.

REHABILITATION

See also Abstract Nos. 866, 896

861. ZAPOTOCZKY, H.-G. Probleme der Rehabilitation. **[Rehabilitation problems.]** *Österreichische Krankenhaus-Zeitung*, Wien, 1980, April, vol. 21, no. 4, p. 214.

A study of rehabilitation centres in Austria has examined the relationships and interplay of the three parties involved: the staff; the patients; and the responsible authority. The staff have two functions which are to some extent contradictory: they not only have to care for, and treat, the patient on a basis of trust but they also have to exercise some sort of discipline. The patients group, on the other hand, which is composed of individuals of differing types, takes the view that it has a right to make demands. Staff and patients are in such close contact that they almost form a group together which is inward looking and is no longer able to direct its feelings and emotions outside the closed community. As a result measures which could relieve this mentally oppressive situation meet with a negative response.

862. GRUBER, F. O. Zentrale Rehabilitation in einem Grossspital. **[Central rehabilitation in a large hospital.]** *Österreichische Krankenhaus-Zeitung*, Wien, 1980, April, vol. 21, no. 4, pp. 218, 219.

In 1975 the Wilhelminen Hospital in Vienna set up a special long-stay and rehabilitation department, mainly for elderly patients. This enables patients to be transferred, within the same hospital, from surgical and acute medical departments directly to a department where they can recover without continuing to occupy acute beds or having to be moved to a separate rehabilitation centre. Patients can remain under the general supervision of the doctor or surgeon who first treated them and can call where necessary on the services of specialist hospital departments. Older patients find it specially helpful that they can remain in Vienna and do not have to be transferred to institutions outside the city. There is a full team of paramedical staff trained in all the rehabilitation disciplines.

863. DEZSY, J. Rehabilitation—eine Teamarbeit. **[Rehabilitation is a matter of teamwork.]** *Österreichische Krankenhaus-Zeitung*, Wein, 1980, April, vol. 21, no. 4, pp. 216, 217.

While the doctor must be finally responsible for rehabilitation measures, and must assess the results of such measures, he must rely on the whole rehabilitation team (including physiotherapists, ergotherapists and speech therapists) to carry out most

of the treatment. In Austria, in contrast to England, rehabilitation centres are not usually departments of a hospital. Team work in rehabilitation should be understood as collaboration between the hospital, paramedical facilities outside the hospital, and general practitioners. This teamwork does not mean anonymity and piecemeal care: it implies teamwork at all levels including the patient-doctor relationship, the patient-rehabilitation team relationship and the triangle patient-hospital-non-hospital facility.

PHYSIOTHERAPY DEPARTMENT

864. EGAN, A. M. **Peer review: one department's experiences.** *Physical Therapy*, Washington, D.C., 1979, July, vol. 59, no. 7, pp. 877-880.

In 1971, the staff of the Department of Physical Therapy at the University Hospitals of Cleveland established a peer review system based on retrospective chart audit and patient care review. The peer review is performed monthly and has three steps: (i) review of physician's notes; (ii) audit of the physical therapy record for the presence of essential items; and (iii) review of patient care to determine the appopriateness of the patient's evaluation and treatment plan. Finally, the committee determines if the record or care provided shows any significant variations or deficiencies. The conclusions are discussed by the committee with the therapist being reviewed. The review has resulted in: (i) improvement in physical therapy written information; (ii) improvement in communication between health care staff owing to more complete patient records; (iii) availability of past reports for review by staff members and accrediting agencies; and (iv) a method of evaluating direct patient services. Other benefits include the compilation of bibliographies relating to specific patient problems and the discussion of possible clinical research projects.

DEPARTMENTS FOR SPECIAL THERAPY

See also Abstract Nos. 867, 879, 888

865. BRESSAN, M. and others. Réflexion sur les problèmes du personnel en réanimation. **[Reflections on personnel problems in resuscitation units.]** *Hôpital à Paris*, Paris, 1980, Jan./Feb., no. 55, pp. 53-55.

Staff problems in a resuscitation unit stem mainly from the nature of the work, the stresses entailed, and the heavy responsibility involved. The unit tends to attract young nurses who like working in a team, feel that their work is important and interesting, and know that they can gain an enormous amount of experience within a relatively short time. The authors suggest that standard staffing levels should be established for each category of staff. Conditions could be improved by making working hours more flexible and by having a fairly long hand-over period between shifts. Senior staff should lend a sympathetic ear to the problems of their juniors. Architecturally the resuscitation unit leaves a lot to be desired. Finally, the authors reject the notion of 'super-nurses' who could specialize in resuscitation.

INTENSIVE CARE UNITS

See Abstract No. 891

SPECIALIZED HOSPITALS AND UNITS

OUT-PATIENT

See also Abstract Nos. 842, 843, 869

866. KRÖSL, W. Die ambulante Rehabilitation—ein zusätzlicher Weg zur Rationalisierung der Behandlung Körperbehinderter. **[Out-patient rehabilitation: another way of rationalizing the treatment of the physically handicapped.]** *Österreichische Krankenhaus-Zeitung*, Wein, 1980, April, vol. 21, no. 4, pp. 208, 211-213.

Out-patient rehabilitation in Austria has the following advantages over rehabilitation as an in-patient: reduction in the work load of accident hospitals; reduction of space requirements in accident hospitals; smooth transition to rehabilitation treatment; reduction in treatment costs of some patients without lowering of standards; advantages for patients who are unwilling, for family or other reasons, to continue as in-patients or to be admitted to hospital; the after-care of patients from accident hospitals is in the hands of doctors who would not be feeling that their operative work was being interrupted; and reduced pressure on rehabilitation centre capacity so that existing facilities would continue to be adequate.

CASUALTY AND ACCIDENT

See also Abstract No. 814

867. MARGAIRAZ, André and others. Place des services de réanimation polyvalente dans l'organisation des urgences médicales en milieu hospitalier. **[The importance of full-time resuscitation in organization of emergency services in hospitals.]** *Hôpital à Paris*, Paris, 1980, Jan./Feb., no. 55, pp. 41-44.

This is a short account of experience in three Parisian hospitals where the multidisciplinary resuscitation unit has assumed responsibility for all emergency services. Statistics from the Henri Mondor Hospital for 1976 showed that an average of 875 'emergencies' were dealt with each month. Only five per cent of these required urgent treatment immediately, 30 per cent required admission to in-patient departments, a further 35 per cent were given a prescription or an appointment for an out-patient consultation, and 19 per cent were discharged next day. A similar picture emerges from a comparison of figures for emergency admissions to the Ambroise Paré Hospital before and after the multi-disciplinary resuscitation unit had taken on responsibility for the emergency unit. In both cases it was possible to provide a more cost-effective and efficient service than before, and patients were not admitted to the wards unnecessarily.

DAY HOSPITALS

868. PEACE, Sheila M. **Caring from day to day: a report on the development of the day hospital within the service for elderly people who are mentally infirm.** London, MIND, 1980. iv, 61pp. bibliog. £1.55

A survey of 27 day hospitals for elderly mentally infirm people in England and Wales is reported. The aims of day hospitals are defined as treatment; assessment; main-

tenance of the elderly person within the community; prevention of full-time hospitalization; support for families and relatives; and rehabilitation and stimulation. A shortage of staff was found in all specialities, particularly occupational therapy, speech therapy and hospital social work. Another major problem identified was inadequate hospital transport. The day hospital service is still in its infancy but it is suggested that alternative forms of day care should be developed for those who do not need intense medical supervision.

869. ADAMS, J. F. and IRELAND, J. T. **An economical multi-purpose ward unit.** *Health Bulletin*, Edinburgh, 1980, March, vol. 38, no. 2, pp. 77-79.

The multi-purpose medical unit at the Southern General Hospital, Glasgow, has four single-bedded cubicles, a curtained single bed area, an examination area and a large day area. The unit accommodates day patients and in-patients who stay for at least one night. Day procedures include marrow biopsies, renal function tests and serial blood sampling. The largest group of in-patients are those who need to stay overnight for various investigations or procedures, such as lumber puncture or liver biopsy. Many are diabetics admitted for changes in insulin regimes. Staffing is provided by a senior enrolled nurse with support from the sisters and staff of neighbouring wards. During the year following July 1978 there were 234 arranged in-patient admissions of which 38 per cent were diabetics and 15 per cent came from haematological reasons. The average length of stay was 3.5 days. In the same period there were 1,222 out-patient attendances of whom 55 per cent were diabetics. A unit such as this provides short admission for patients who are not actually ill, but need tests or supervision. It is easy to run, but its success depends upon the support of other facilities in the hospital.

INFECTIOUS DISEASES AND ISOLATION

See Abstract No. 875

CHILDREN

See also Abstract No. 885

870. SCHOLS, W. Onderwijs geven aan langdurig zieke kinderen. **[Providing education for long-term child patients.]** *Ziekenhuis*, Utrecht, 1980, March 19, vol. 10, no. 6, pp. 174-176.

A report from the National Hospital Council in the Netherlands has drawn attention to the traumatic effect a stay in hospital can have on a child. A number of recommendations are made, including education at all levels for children whose hospital stay exceeds three weeks, i.e. nursery, primary and secondary schooling, preparation for higher education and special education for disturbed children. At present there are some 25 'hospital schools' in various towns in The Netherlands, and more are planned. The teachers, who attend children at their bedside, have the normal qualifications, but need additional qualities such as patience, flexibility, understanding, perseverance and discretion. The usual procedure for a child to receive hospital teaching is for the hospital to notify the parents of the child's prolonged stay and the

parents then forward an application form, via the head of the children's ward, to the hospital school. A teacher then prepares a programme for the child, based on the medical and para-medical data and after an introduction to the child, observation, and contacts with the child's own school. The aim is to provide academic instruction and improve the hospital atmosphere. This procedure varies somewhat according to the different towns and schools. A school requires a minimum of 24 pupils per year to receive a Government licence. The paper mentions the history of hospital schools (beginning in Amsterdam in 1903) and lists schools and their special contributions.

871. MOLL, Ursula and BÖRGERS, Angelika. Kinderängste im Krankenhaus. **[Children's fear of hospital.]** *Krankenhaus*, Stuttgart, 1980, March, vol. 72, no. 3, pp. 82-86.

An enquiry into the effects on children of a stay in hospital, and an analysis of statements by 400 parents over a number of years, has shown that the presence of a parent and the visiting hours permitted, have a decisive influence on the incidence of mental trauma. The less the separation of parent and child the less the incidence of behavioural disturbances, and such symptoms as bedwetting, nail-biting and nightmares. The best way to help children is to admit a parent with them for the period of their stay but this must be limited because of lack of space and for financial and social reasons. What is desirable is unlimited visiting, at least during the early, critical days. The results of the enquiry are set out in a number of statistical tables.

872. STENBAK, Else. Forberedelse af raske børn til hospitalsmiljøet. En model til forebyggelse af børns negative reaktioner på hospitalsindläggelse. **[Preparation of healthy children for a hospital environment: a suggested method for preventing negative reactions by children on admission to hospital.]** *Sygeplejersken*, København, 1980, March 5, no. 10, supplement; pp. 3-11.

About half of all Danish children are admitted to hospital before their fifteenth year. More than 80 per cent of these admissions are acute cases who have had no opportunity of any preparation before admission. This paper describes how this problem has been tackled at Hvidovre Hospital, Copenhagen, since 1977 by arranging for parties of healthy children aged two to 10 years to visit the hospital. Children, in groups of 10 to 15, are shown round the hospital, have procedures and equipment explained to them, meet the staff, and have all their questions answered. The paper is illustrated with a series of photographs. There are two appendices: the first sets out the programme for a children's visit and the second gives the text of a talk to parents about the scheme.

873. MEYL, Fleur. Gastarbeiterkinder im Krankenhaus: Toleranz und Verständnis. **[Children of foreign workers in hospital: tolerance and understanding.]** *Krankenhaus*, Stuttgart, 1980, April, vol. 72, no. 4, pp. 123-127.

This paper on the care of children of foreign workers in hospital is mainly concerned with problems of education and communication although other aspects are dealt with to some extent. It is important that a child should have as small a number of nurses to deal with as possible. Language problems can be alleviated if the help of other

patients and of hospital staff, who may be able to interpret, is enlisted. Where possible parents should be given written information in their own language about the hospital and about the child's treatment. Wherever possible children of the same nationality, or who speak the same language, should be together: differences in age are of much less importance here.

874. OSWIN, Maureen. **The rights of children in hospital.** *Concern*, London, 1980, no. 35, pp. 11-15.

The author maintains that children in hospital have a right: (i) to have their parents with them; (ii) to receive care from qualified paediatricians and paediatric nurses; and (iii) to be provided with facilities for play and education. Children in hospital for several months should be visited by brothers and sisters; parents should be offered help with travelling expenses. Similar needs are experienced by children who need repeated stays in hospitals and this group should, where possible, be seen by the same staff on each visit. About 5,000 handicapped children live in long-stay hospitals. In addition to the rights already mentioned, these children have a major human right to live in the community and long-stay hospital care is totally inappropriate. The following action is needed to protect the child in hospital: (i) a national check on what is happening to children in all types of hospital; (ii) people who work with children must have the appropriate training; and (iii) handicapped children should not live in hospital unless receiving some special treatment only available within one particular hospital ward.

875. RETHING, Susanne. Erfaringer fra isolationsafdeling for børn: fysisk isolation må ikke blive psykisk isolation. **[Experiences in a paediatric isolation unit: physical isolation must not become mental isolation.]** *Sygeplejersken*, København, 1980, March 26, no. 13, pp. 20-23.

A student nurse who worked for four months in the children's isolation unit at the Rigshospital, Copenhagen, gives a description of her work, illustrated with photographs. She gives two case histories of her young patients and explains how they reacted to the loneliness. She concludes that it is important for the child that physical isolation should not lead to mental isolation: the nurse must learn to listen to the isolated child.

876. THOMASSON, Jan. Här satsar man på att barn ska trivas. **[Arrangements to ensure that children feel at home.]** *Vårdfacket*, Stockholm, 1980, April 3, vol. 4, no. 7, pp. 8-12.

This illustrated account of a visit to the Children's department of Helsingborg Hospital describes what is being done there to make a stay in hospital more bearable. Mothers can stay in hospital with their children; both parents and children visit the hospital before they are admitted, to give them an idea of what a hospital stay is going to be like; part-time teachers attend for children of school age. Co-operation with the social services department makes it possible for children to be cared for in their own homes, either when admission to hospital is not thought necessary or after discharge.

GERIATRICS AND LONG-STAY

See also Abstract Nos. 868, 874, 898

877. MYRTLE, Robert C. and ROBERTSON, Juan P. **Determinants of job satisfaction in nursing care units.** *Journal of Long-term Care Administration*, Washington, D.C., 1979, vol. 7, no. 4, pp. 17-29.

Considerable attention has been given to containing health care costs by structural approaches and budgetary means. Often overlooked are the costs associated with staff turnover and absenteeism. One of the more important contributing factors to this withdrawal behaviour is job satisfaction. A 197-item survey questionnaire was used in four hospitals in the Los Angeles-Long Beach area to identify the variables which lead to the best prediction of job satisfaction. Analysis of the replies identified 15 factors that accounted for 82 per cent of the variation in job satisfaction. Knowing how nursing aides responded to these 15 questions, it was possible to predict how satisfied they were with their jobs. The results suggested that job satisfaction was influenced by procedures and practices that are organizational in their impact, by interactions with the work team and supervizor, and by the daily activities of the job. By understanding the interactive effect of these factors on job satisfaction, improvements in absenteeism and turnover can be realized with a reduction in staff costs and improvements in the quality of care.

878. COVELL, B. and ANGUS, Margaret M. **A comparison of the characteristics of elderly patients admitted to acute medical and geriatric wards.** *Health Bulletin*, Edinburgh, 1980, March, vol. 38, no. 2, pp. 64-70.

Two independent studies were carried out in Edinburgh hospitals to determine the characteristics of patients over 65 admitted to acute medical wards and to geriatric wards. The first group consisted of 100 patients admitted to the medical unit of the Eastern General Hospital and 100 admitted to the Royal Victoria Geriatric Hospital during 1976. The second study took place at the large Western General Hospital where patients aged over 70 admitted to medical wards were studied over a three month period. There were marked differences between the two groups of patients. Those admitted to geriatric wards were older, stayed longer and suffered mainly from chronic disorders. In general patients admitted to medical wards were suffering from acute medical conditions and were, therefore, correctly placed, although a degree of bed blocking occurred once the acute phase was over. This could be avoided if there was more selection in admission procedures and more places available in rehabilitation units. Detailed results are given in five tables.

879. MORRIS, J. B. BRASH, L. F. and HIRD, M. D. **Chiropodial survey of geriatric and psychiatric hospital in-patients—Angus district.** *Chiropodist*, London, 1980, April, vol. 35, no. 4, pp. 128-139.

A survey of the chiropodial needs of psychiatric and geriatric hospital in-patients in the Angus District was carried out to determine the prevalence of chiropodial conditions and the level of staffing required. Patients were divided into four groups according to the level of chiropodial care needed. Nail conditions were the most

common in all four groups, followed by skin conditions. About two-thirds of the patients suffered from three or more categories of chiropodial conditions, which indicated that the patients, most of whom were elderly, required a considerable amount of chiropodial attention. There was no connection between chiropodial conditions and the patients' level of activity. Only 73 per cent of the 96 per cent of patients assessed as needing chiropodial care were actually receiving it at the time of the study. Routine assessment should be given on admission. Some patients require short interval treatments, and some long. Using the ratio between the two types and the accepted work load for a chiropodist of 16 patients a day, staffing requirements could be assessed more accurately. Basing requirements on a six week interval for all patients may lead to over-estimation of needs at a time when resources are scarce.

CANCER

880. DRUMM, Peter. Hvordan effekten af smertebehandling af onkologiske terminal-patienter kan måles: kun patienten kan fortälle os hvad smerter er. **[How the effects of pain treatment in terminal cancer patients can be measured: only the patients can tell us what they are suffering.]** *Sygeplejersken*, København, 1980, March 19, no. 12, pp. 24-31.

The paper describes and illustrates a form which has been used in two Copenhagen hospitals and enables terminal cancer patients themselves to record at stated time the degree of pain they feel, their degree of anxiety or panic, and their type of sleep and consciousness. Patients are given an information sheet which explains the purpose of the form and how it should be filled in. There are reservations about generalizing from the data to individual patients.

881. HALL, Gayle L., MELROSE, Raymond J. and ABRAMS, Albert M. **Education in early detection of oral squamous cell carcinoma: a community outreach program.** *Journal of the American Dental Association*, Chicago, Ill., 1980, March, vol. 100, no. 3, pp. 362-365.

To help dentists with the early detection of oral cancer, the University of Southern California School of Dentistry developed a community programme for education in oral cancer. The programme, consisting of a slide presentation and lecture on squamous cell carcinoma, was shown to 1,011 dentists, 497 dental hygienists and 1,717 dental assistants during 22 months. Each participant was given a course evaluation to complete. The section of the programme on early clinical recognition was found to be the most informative for everyone. In answer to a follow-up questionnaire sent to 750 dentists, 83 per cent felt that their ability to detect early mucosal disease had been increased and the majority of dentists found no difficulty in implementing a programme of early detection into their services to patients. The large number of participants suggests that continuing education in their own surgeries was a better way of spreading information on oral cancer than running university-based courses which dentists would have to leave their practices to attend. Because the course was federally funded there was no fee for the presentation.

NEUROLOGY AND NEUROSURGERY

882. ROYAL COLLEGE OF PHYSICIANS OF LONDON. COMMITTEE ON NEUROLOGY. **Report on recommended minimum standards for departments of clinical neurophysiology in the National Health Service.** (Chairman: Dr. C. J. Earl). [London], Royal College of Physicians, 1979. [ii], 3pp.

The development of clinical neurophysiology, particularly electroencephalography, in the United Kingdom tended at first to be haphazard, resulting in diversity of technical and clinical standards as well as of departmental size and organization. In some units, for instance, a technician presents what amounts to a clinical opinion upon the investigations carried out, a medically undesirable practice. The committee outlines the following staff requirements for 2,000 investigations per year: (i) one full-time consultant; (ii) three physiological measurement technicians, a fourth is needed if bedside recording, paediatric or other time-consuming work is required; (iii) one medical secretary; (iv) access to skilled nursing assistance; and (v) an electronic engineer. The total areas of laboratory and office space should not be less than 186 sq. metres. Recommendations about equipment are given and various costings provided.

CARDIOLOGY

See also Abstract Nos. 841, 842, 889

883. HOISCHEN, Hans. Klinik für Herzund Kreislauferkrankungen Roderbirken/Leichlingen. **[The hospital for diseases of the heart and circulation at Roderbirken/Leichlingen.]** *Krankenhaus-Umschau*, Kulmbach, 1980, March, vol. 49, no. 3, pp. 190-192.

The new 252-bed hospital for diseases of the heart and circulation at Roderbirken/Leichlingen (Rhine Province) came into use in February 1979. The two floors of the podium provide examination and treatment departments plus a six-bedded intensive care unit, and above these rises the Y-shaped ward block of seven floors. There is a central traffic core. The two ward wings on each floor have together 12 double and 12 single patients' rooms while the third wing houses ancillary rooms. All patients' rooms face south-east or south-west: each room has its own wash and toilet facilities and a loggia. The basement houses a patients' lecture room, workrooms for occupational therapy, X-ray records room, and stores. The paper is illustrated with a photograph of the exterior and a sectional drawing.

884. WILLEMS, Jos L. **A plea for common standards in computer aided ECG analysis.** *Computers and Biomedical Research*, New York, 1980, April, vol. 13, no. 2, pp. 120-131.

There has been a rapid expansion of computerized electrocardiography in recent years and the number of different ECG computer programs has increased steadily. Basically each program has two parts: (i) measurement, in which various algorithms are used for wave recognition, beat selection and parameter extraction; and (ii) interpretation, in which different criteria and classification schemes are applied to the computed measurements in order to arrive at diagnostic ECG statements. To

evaluate and compare the programs, basic measurement results from identical ECG records were computed by the AVA(3.6), TNO(7603), HP-5, IBM (version 2), and ECAN-D ECG computer programs. Substantial differences were demonstrated in time measurements but not in amplitude results. Such differences are not unexpected, even when identical digital data are used as input. Various programs apply different algorithms and references for wave recognition, beat selection and parameter extraction, leading to systematic and significant differences in measurement results and ultimately also in diagnoses. A plea is made for common standards of definition of waves and measurement references.

RHEUMATISM

See Abstract No. 849

UROLOGY

885. LUPTON, Ruth. **Caring for children in renal failure: report of the conference held at the King's Fund Centre on Tuesday 9 October 1979.** London, King's Fund Centre, 1979. [ii], 12pp. (KFC 79/309)

The papers presented here are from a conference arranged by the King's Fund Centre, the Renal Society and the Royal College of Nursing Renal and Transplant Forum. The authors include a paediatrician, a nephrologist, a nursing officer and a medical social worker; each deals with their own particular aspects of care. The discussions include contributions from parents and a young ex-patient.

886. ROBERTS, Stephen D., MAXWELL, Douglas R. and GROSS, Thomas L. **Cost-effective care of end-stage renal disease: a billion dollar question.** *Annals of Internal Medicine*, Philadelphia, Pa., 1980, Feb., vol. 92, no. 2(1), pp. 243-248.

A computer simulation model of the care system for end-stage renal disease was constructed to estimate the cost-effectiveness of home and centre haemodialysis and live related as well as cadaver donor renal transplantation. The model was written in the Integrated Network Simulation language. Data were drawn principally from the reports of the National Dialysis Registry and Human Renal Transplant Registry. Analysis of the simulation showed that live related donor transplantation was the least costly and had the greatest survival time, while centre haemodialysis had the poorest cost-effectiveness. By simulating changes to the present system, it was found that moves from centre dialysis to either home dialysis or cadaver donor transplantation would save $7,000 to $8,000 per life year, or $284 million per year for the existing end-stage renal disease population. However, if legislative changes fail to produce real moves away from centre haemodialysis, costs will increase. It is concluded that the substantial costs for end-stage renal disease can be contained by shifting from the widespread use of centre haemodialysis.

887. LAING, William. **End stage renal failure.** London, Office of Health Economics, 1980. 8pp. bibliog. (OHE Briefing No. 11) £0.30

The United Kingdom's performance in the treatment of chronic renal failure is discussed. Britain was the first country to set up a national network of treatment

centres and by concentrating on transplantation and home dialysis has achieved the most cost-effective system in the world. Against this, because of lack of resources, facilities are in short supply and many patients, particularly those over 55, are not treated. The author points out that the dilemmas now occuring over renal failure are likely to occur in other fields where expensive but effective technology is being developed (heart transplants, for example).

888. Ein schlüsselfertiges Limited-care-Zentrum. **[A pre-fabricated limited-care dialysis centre.]** *Krankenhaus-Umschau*, Kulmbach, 1980, March, vol. 49, no. 3, p. 193.

The pre-fabricated dialysis centre in Hamburg, supplied by the German branch of a Swedish firm, was erected in 1977. It is a 'limited care' centre in which patients carry out their own dialysis under the supervision of a nurse. The building was supplied in 20 sections which were erected on the site within a few days. The centre has six treatment rooms, an examination room, a nurses' room, kitchen, rest room, office, waiting room, toilets, shower and sluice. Each treatment room can take two patients and is in touch with the nurse through a two-way call system. A nurse and a nursing assistant are on duty for each of the four daily shifts; 48 patients can be treated daily. A separate, independent building for dialysis patients reduces the infection risk and avoids a hospital atmosphere.

SURGERY

889. KRUSE, Munksgård and RYDEN, Lars. Utvecklingsarbete på Kärnsjukhuset: pacemakers opereras in med lokalbedövning. **[Developmental work at the Kärn Hospital: pacemaker operations under local anaesthetic.]** *Sjukhuset*, Göteborg, 1980, vol. 57, no. 3, pp. 134-136.

A brief, illustrated account is given of the development of pacemakers from the models first implanted in 1958 up to the latest electronic models weighing only 40 to 50 grams. A great deal of research and development has been carried out at the Kärn Hospital at Skövde, in Sweden, where a special unit operates. Between 80 and 100 pacemakers are implanted at this hospital annually under local anaesthesia.

890. BOORE, Jennifer. **Pre-operative information and post-operative recovery.** *NATNews*, Matlock, 1980, Jan., vol. 17, no. 1, pp. 16, 17, 19, 22.

In a study of the effect of pre-operative preparation, designed to minimize helplessness and anxiety, patients aged from 18 to 65 years having routine surgery for non-malignant conditions were allocated randomly to an experimental and a control group. Each patient in the experimental group was given information about events before the operation, having an anaesthetic, and what it would be like after the operation. Deep-breathing and coughing, and leg exercises were taught and practiced. The post-operative measurements undertaken on both groups fell into three categories: (i) biochemical indicators of stress; (ii) objective measures of the patient's physical condition; and (iii) subjective measurements of the patient's state as seen by the patient, and the assessment of their progress by the ward sister and registrar. A number of the dependent variables did not show any difference between the experimental and control

groups; but there were statistically significant differences between the two groups in the levels of 17 hydrocorticosteroids secreted and in the incidence of infection. It appears that pre-operative preparation is beneficial to patients, and may be economically valuable if infection and length of stay can be reduced.

MATERNITY

891. RISER, Eve, NOONE, Paul and HOWARD, Frances M. **Epidemiological study of *klebsiella* infection in the special care baby unit of a London hospital.** *Journal of Clinical Pathology*, London, 1980, April, vol. 33, no. 4, pp. 400-407.

Of the babies admitted to the special care baby unit of the Royal Free Hospital over a period of 20 months, 10.2 per cent were infected or colonized by *Klebsiella*. The fluourescent antibody technique was used to identify epidemics caused by the following strains: (i) capsular type 8 *K. aerogenes* (43.3 per cent of *Klebsiella* isolated); (ii) type 68 *K. oxytoca;* and (iii) type 13 *K. aerogenes*. Each strain was predominant at a different time, differed in virulence and showed a predilection for different sites of infection. Colonization in the intestines was frequently followed by the presence of sepsis of the same type in other sites. The use of antibiotics increased the incidence of *Klebsiella* infection and the use of compounds containing hexachlorophane may have contributed to skin colonization by *Klebsiella*. A survey showed that: (i) Hycolin failed to disinfect incubators; (ii) the babies were the reservoirs of the organisms; and (iii) transmission was caused by inadequate handwashing by nurses and mothers. Mothers were observed in various practices which could have contributed to the spread of the organism. It has since been recommended that mothers be instructed in the hygienic procedures required when dealing with premature babies and that staff be more strict in their own observance of these procedures.

892. ALDER, V. G. and others. **Comparison of hexachlorophane and chlorhexidine powders in prevention of neonatal infection.** *Archives of Disease in Childhood*, London, 1980, April, vol. 55, no. 4, pp. 277-280.

In a study at Bristol Maternity Hospital, infants of at least 37 weeks' gestation and born by vaginal delivery were randomly selected and placed in two groups of 87 each. At birth, the cord was cut at 4 cm from the skin, ligated with a rubber-band, and sprayed with a chlorhexidine preparation (Hibispray No. 1). The management of all the infants was identical except for the disinfectant powder used. One group was treated with a talcum powder containing one per cent chlorhexidine (Hibitane) and the other with 0.33 per cent hexachlorophane powder (Ster-zac) already in routine use in the hospital. Each was equally effective in preventing colonization and infection by *Staphylococcus aureaus*. In contrast, the skin became profusely colonized by coagulase-negative staphylococci, irrespective of the powder used. Venous blood concentrations of chlorhexidine were low or undetectable in the few infants whose blood was analyzed. It is concluded that chlorhexidine is as effective as hexachlorophane and since evidence suggests that it has a wider margin of safety than hexachlorophane. many will probably prefer it.

GYNAECOLOGY

See Abstract No. 763

DENTISTRY

See also Abstract No. 881

893. COHEN, Alan J., WEINSTEIN, Philip and WURSTER, Carol. **The effects of patient-initiated phone confirmation strategies on appointment keeping at a hospital dental clinic.** *Journal of Public Health Dentistry*, Raleigh, N.C., 1980, vol. 40, no. 1, pp. 64-68.

It is not unusual to find that hospital clinics have broken appointment rates of 20 to 50 per cent. Telephone and postcard reminders have been used successfully in reducing broken appointments. However, these methods are costly and do not require the patient to do anything more than receive the reminder passively. In an investigation in the dental clinic at Harborview Medical Center, three interventions were tested: (i) traditional clinic-initiated telephone reminder one day prior to the appointment; (ii) posted reminder requesting patient-initiated confirmation by telephone; and (iii) postcard reminder given to the patient at the appointment desk, also requesting telephone confirmation. Prior to the study, without any reminder system, the broken appointment rate was 30.2 per cent. During the study it was 23.5 per cent, 21.2 per cent and 11.5 per cent respectively for the three methods. The results of the investigation indicate the feasibility of patient-initiated confirmation strategies in appointment control. They suggest a combined system might be the best strategy. The patient would be given the appointment card at the clinic; if he failed to confirm the appointment by the designated time, the clinic would try to telephone him the day before the appointment.

PSYCHIATRY

See also Abstract Nos. 788, 868, 879

894. HORN, G. H. M. M. and SEBENS, B. Bezoek aan psychiatrische patiënten gaat gepaard met reisperikelen. **[Visiting psychiatric patients and travel difficulties.]** *Ziekenhuis*, Utrecht, 1980, March 19, vol. 10, no. 6, pp. 158-161.

Psychiatric hospitals are often in remote areas. A team from Groningen University carried out research into travelling times by public transport for visitors to patients in five psychiatric hospitals in The Netherlands in 1977. The authors investigated the travelling times from homes and hospitals to railway stations and bus stops, and the actual journeys by bus or train. It was found that long travelling times, even for comparatively short journeys, occured due to poor public transport connections, infrequent services, lack of synchronization between visiting hours and public transport time-tables, and long distances from homes and hospitals to rail and bus stops. Where a choice was available, the same journey from home to hospital took less time by train than by bus. Travelling by private car was always preferable, but approximately one quarter of the visitors, for various reasons, had to rely on public transport. The calculations are presented in five tables, giving figures for numbers of patients, travelling times from various destinations, numbers of visitors, numbers of towns and villages, percentage admissions per thousand population from various areas. The only suggestion made is for hospitals to try to make their visiting hours coincide with transport time-tables.

895. SHENNAN, Victoria. **Mental handicap nursing and care.** London, Souvenir Press, 1980. 208pp. bibliog. ISBN 0 285 64902 7 £3.95

An attempt is being made in the United Kingdom to reduce the number of patients in psychiatric hospitals. This book considers the possibilities for other forms of residential care and community care. There are chapters on basic health care, specialized hospital care and special therapy techniques. Social as well as health topics are covered with chapters on the school years, puberty and adolescence, and adult life. A bibliography and a list of useful addresses are provided.

896. HARTMANN, O. Rehabilitation im psychiatrischen Krankenhaus. **[Rehabilitation in the psychiatric hospital.]** *Österreichische Krankenhaus-Zeitung*, Wien, 1980, April, vol. 21, no. 4, pp. 220-223.

In the psychiatric hospital medical measures alone are insufficient: occupational and social measures, as far as possible with the patients' co-operation, must also be carried out. All these measures are to be co-ordinated in a rehabilitation unit and implemented in a therapeutic community which serves as a society in miniature. Among the activities and facilities provided are the following, which are briefly described: therapeutic workshops; sheltered workshops; day hospitals; night hospitals; social rehabilitation; patients' clubs; and groups for relations of patients.

897. BERSET, B. L'hôpital psychiatrique: vers une nouvelle conception? **[Towards a new concept of the psychiatric hospital?]** *Hospitalis*, Zurich, 1980, no. 4, pp. 217, 218.

This article deals with the problems facing psychiatric hospitals today. The first is the particular nature of the institution itself: psychiatric hospitals are generally cut off physically from society and often look like prisons. Efforts to open them out to society are attacked by an ill-informed and frightened public. The second problem is the particular nature of psychiatric patients: the mentally handicapped and retarded, the psychopath, the pervert, the psychotic, the alcoholic and the drug addict are all treated in a psychiatric hospital, and so are the very senile elderly subjects. Now that attempts are being made to treat some types of patient outside the hospital context, what is to be done with others, such as the alcoholics and the drug addicts, who should never have been in a psychiatric hospital in the first place?

898. MCCREADIE, Robin G. **Clinical and social aspects of long-stay psychiatric patients.** *Health Bulletin*, Edinburgh, 1980, March, vol. 38, no. 2, pp. 70-75.

During one-week in October 1978 a census was taken of all in-patients under 65 who had been in Gartnavel Royal Hospital, Glasgow for at least one year, and their clinical and social characteristics were compared with the results of a study carried out six years earlier. The study showed that the long-stay in-patient population under 65 years of age continues to fall, the number in 1978 being 157, 35 per cent less than the 1972 figure. Of the 157 patients, 38 per cent had been in hospital over 20 years, 21 per cent between one and five years; 65 per cent were schizophrenic. There were more day patients in 1978 than in 1972, and they attended for a longer period. In 1978, 49 per cent of the 'new clinic' patients of 1972 were still in hospital and 25 per cent had died. The results of the comparison suggest that, while the total of long-stay

patients has decreased, there is a hard core of patients remaining in hospital and 'new chronics' are suffering from organic brain disease rather than from schizophrenia. Some chronic patients under 65 are accommodated in rehabilitation units and spend longer in the community, thereby reducing the numbers in long stay in-patient care.

SOCIAL MEDICINE

See also Abstract No. 807

899. KUNZE, M. Möglichkeiten und Grenzen der Entlastung des Krankenhauswesens aus sozial- und präventivmedizinscher Sicht. **[Relieving the pressure on hospitals by measures of social and preventive medicine: possibilities and limitations.]** *Österreichische Krankenhaus-Zeitung*, Wien, 1980, Jan., vol. 21, no. 1, pp. 21, 22, 24-26.

While preventive measures can be effective in the short term against infectious diseases, and to some extent against accidents as well, the case of chronic and non-infectious diseases is a long term matter. A distinction is made between 'primary' prevention (the prevention of illness) and 'secondary' prevention (early recognition of disease). Measures of secondary prevention will, on the short term, increase the hospitals' burden of work and it must be borne in mind that the increase in life expectancy resulting from prevention measures may well lead to an increase in chronic disease in the elderly and thus to an increase in the demand for hospital services. If secondary prevention is to be successful the public must be encouraged to submit themselves to early medical examination. The conclusion is that no dramatic success may be expected in the short and middle term from preventive measures. But in the long term, especially in cancer and in the early recognition of disease, the possibilities are promising. A stay in hospital may often give an opportunity for general health education and advice on disease prevention (which may be quite unconnected with the actual reason for admission).

900. NATHANSON, Constance A. and BECKER, Marshall H. **Obstetricians' attitudes and hospital abortion services.** *Family Planning Perspectives*, New York, 1980, Jan./Feb., vol. 12, no. 1, pp. 26-32.

Since abortion was legalized in the United States in 1973, hospitals have played a decreasing role in meeting the demand for abortion services; most abortions are now performed in free-standing non-hospital clinics. In 1976, there were 53 acute-care general hospitals in Maryland; seven of these were operated by the federal government and six were Catholic. None of the Catholic hospitals and only one of the Federal hospitals performed any abortions in 1976. Six hospitals (11 per cent) performed 68 per cent of all abortions in Maryland hospitals. A survey of the hospitals found that the effect of physician attitudes to abortion on the number of abortions performed in hospitals is quite strong, and is independent of the effects of hospital size, number of medical departments, and community need for abortion services. However, the range of abortion-related services provided (such as contraception and counselling for abortion patients) is not significantly influenced by physicians' attitudes.

SUBJECT INDEX

The reference is to the abstract number, not to the page

Abortion services, effect of physicians' attitudes, 900
  Santa Corona Hospital, Milan, 807
Administration, 792
Air conditioning, in operating theatres, renewing old plant, 771
  wards, 772
Air hygiene, in operating theatres, 831
American Nurses Association, role in industrial relations, 778
Anaesthetic gases, in operating theatres, staff exposure, 851
Appointments, broken, reduction, 893
Austria, guidelines for the automatic dosage of chemical disinfectants, 828
  health services, economic aspects, 811
  out-patient rehabilitation, 866

Bed use, geriatric patients, 878
Blood banks, refrigeration equipment, 856
Boilers, spray recuperation systems, increase in efficiency by, 767
Budgeting, 817

Canada, hospital pharmacies, 853
Cancer, oral, detection, training programme for dental staff, 881
Cancer patients, form for self-recording pain levels, 880
Cardiac patients, health education, 841
Casualty services, role of resuscitation units, 867
Catering departments, costs and efficiency, 820
  patients' opinions, 823
  staff opinions, 823
Central sterile supply departments, costs, control, 818
Children, care, in Helsingborg Hospital, 876
    renal failure, 885
  healthy, institutional visits to Hvidovre Hospital, Copenhagen, 872
  in hospital, rights, 874
    value of parent admissions and visiting, 871
  isolation wards, care of, 875
Chiropody, needs of geriatric and psychiatric patients, 879
Chronic patients, health education, 843
Cleaning, 826
Cost accounting, as a measure of performance, 816
  case-mix, 817
Costs, control, 818
    emergency departments, 814

Day hospitals, psycho-geriatric patients, 868
Day patients, medical unit, 869
Denmark, nursing objectives, 789
Dental clinics, appointments, confirmation system, 893
Dental staff, training, detection of oral cancer programme, 881
Design, general hospitals, Norway, 762
  gynaecology units, Sweden, 763
  heart and circulation diseases hospitals, 883
Diagnostic X-ray, reports, electronic data processing, 858
Diets, therapeutic, rationalization, 819
Discharge, early, evaluation, 794
Disinfectants, chemical, Austrian guidelines for automatic dosage, 828
  guidelines on dosage apparatus, 827
Disposable(s), tea-towels, evaluation, 824
Drainage, 835
Drugs, assay services, use, 854
  use, for pain relief, 846

Efficiency, determination of, 810
evaluation, operational research, 848
use of cost accounting in determining, 816
Electrocardiograms, electronic data processing, programs compared, 884
Electro-encephalography, standards, 882
Electronic data processing, customized dosages, 797
diagnostic nuclear medicine, 857
diagnostic X-ray, reports, 858
electrocardiograms, programs compared, 884
Roman Catholic Hospital, Groningen, 798
West Germany, protection of information, 805
Emergency departments, costs, control, 814
Energy, conservation, boiler spray recuperation systems, 767
heat recovery, 770
saving, 768
heat recovery, 769
Engineering installations, Westlinde Hospital, The Hague, 766
Equipment, maintenance, 773
Estate management, Great Britain, 764
European Community, hospital services, 759
nursing, 783

Finance, management, 813
West Germany, proposed new legislation, 812
Fire prevention, 838
legal responsibilities, Norway, 837
Floors, cleaning, 775
Foreign children in German hospitals, care of, 873
France, private hospitals and the health service, 757

Gardens, roof, West Suffolk General Hospital, 765
General practitioners, hospitals, United States, 844
Geriatric patients, bed use, 878
chiropodial needs, 879
Gynaecology units, design, Sweden, 763

Haemodialysis, centre, prefabricated, Hamburg, 888
cost-effectiveness, 886
United Kingdom, 887
Hamburg, prefabricated haemodialysis centre, 888
Health education, chronic patients, 843
heart disease, 841
Health insurance, private, Great Britain, 755
United States, 815
Health services, Austria, economic aspects, 811
Heart and circulation diseases hospital, Roderbirken/Leichlingen, design, 883
Heat recovery, 769
energy conservation, 770
Helsingborg Hospital, care of children, 876
Hospices, 850
Hospital infection, laboratories, prevention, 829
newborn babies, prevention, 892
prevention, 830
Hospital services, England, 754
European Community, 759
France, 759
Hospitals, role in the prevention of disease, 899
United States, publicly owned, 760
Hygiene, kitchens, 822

Industrial relations, medical staff, United States, 779
role of American Nurses Association, 778

Information systems, 801
Installations, maintenance, 773
Isolation units, children, care of, 875

Job satisfaction, nursing aides, 877

Kitchens, hygiene, 822
  Klagenfurt Provincial Hospital, new buildings, 821
Klagenfurt Provincial Hospital, new kitchens, 821
Klebsiella infection, in special care baby units, 891

Laboratories, infection, prevention, 829
Laundries, costs, control, 818
  efficiency, West Germany, 825
Legislation, fire, prevention, Norway, 837
Libraries, nursing, England, history, 799
  planning, 800
Linen, soiled, piped transport system, 834
London, teaching hospitals reorganization, 752, 756
Long-stay departments, Wilhelminen Hospital, Vienna, 862

Maintenance, of installations and equipment, 773
Management efficiency in West German hospitals, 793
Medical records, patient as co-author, 802
  privacy, and research needs, 804
  United Kingdom, 803
Medical staff,
  industrial relations, United States, 779
  organization structure, 781
  training, London, 752
Medical technology, post-basic training for nurses, 776
Mentally handicapped patients, care, 788, 895
Military hospital, Sandhurst, 753

Neurophysiology departments, standards, 882
Newborn babies, infection, prevention, 892
Norway, hospital research, 761
Nuclear medicine, diagnostic, electronic data processing, 857
Nurse tutors, work study, 785
Nurses, communication with intubated patients, 845
  industrial relations, role of American Nurses Association, 778
  relationship with patients, 790
  resuscitation units, 865
  role in patient self-care, 787
  self-realization, 786
  training, post-basic, in medical technology, 776
Nursing aides, job satisfaction, 877
Nursing, European Community, 783
  libraries, England, history, 799
  management, 784
  objectives in Denmark, 789
Nursing group, initiation and practical training of student nurses, 782
Nursing homes, United States, 758

Operating theatres, air-conditioning, renewal of old plant, 771
  air hygiene, 831
  anaesthetic gases, staff, exposure, 851
Out-patient departments, medical unit, 869
Out-patients, health education, 843
Oxygen outlets, survey, 774

Pacemakers, development in Sweden, 889
Pain, drug treatment, 846

Patients, care, basic requirements, 839
quality, evaluation, 847
operational research, 848
in physiotherapy departments, 864
psychiatric services, 895
renal failure, 885
co-authors of medical records, 802
expectations, 849
intubated, communication with nurses, 845
relationship with staff, 790, 840
Pharmacies, Canada, 853
practice, 852
Pharmacists, role, Netherlands, 855
Physiotherapy departments, peer review, 864
Pipes, for refuse disposal and soiled linen, 834
Planning, libraries, 800
Prescribing, customized dosages, electronic data processing, 797
Preventive measures, role of the hospital, 899
Private hospitals, France, and the health service, 757
Great Britain, 751
Private medical care, insurance, Great Britain, 755
Psychiatric hospitals, problems, 897
rehabilitation, 896
transport problems for visitors, Netherlands, 894
Psychiatric patients, chiropodial needs, 879
long-stay, 898
Psychiatric services, hospital v. community care, 895
Psycho-geriatric patients, day hospitals, 868

Radiotherapy services, organization, 860
West Germany, 859
Refrigeration equipment, blood banks, 856
Refuse, disposal, piping system, 834
Rehabilitation, out-patient services, Austria, 866
psychiatric hospitals, 896
teamwork, 863
Rehabilitation centres, relationships between staff and patients, 861
Rehabilitation department, Wilhelminen Hospital, Vienna, 862
Relatives, relationship with staff, 790
transport problems, visits to psychiatric hospitals, Netherlands, 894
Renal failure, children, care, 885
treatment, cost-effectiveness, 886
Renal transplantation, cost-effectiveness, 886
United Kingdom, 887
Research, in medical records, privacy problem, 804
Norway, 761
Resuscitation units, role, in emergency services, 867
Roderbirken/Leichlingen (Rhine), hospital for heart and circulation diseases, design, 883
Roof garden, West Suffolk General Hospital, 765

Safety, Scottish hospitals, 836
Sandhurst Military Hospital, 753
Schools, in hospitals, Netherlands, 870
Scotland, hospitals, safety, 836
Self-care, role of the nurse, 787
Sewerage, 835
Shared services, United States, 809
Short-stay hospitals, use, statistics, United States, 808
Sogn & Fjordane County Hospital (Norway), design, 762
Special baby care units, *klebsiella* infection, 891

Staff, health risks, from anaesthetic gases, 851
from pressure of work, 780
relationship with patients, 810
working conditions, 780
Staphylococcus aureus, resistance to gentamicin, plasmid analysis, 832
Statistics, collection, United States, 806
Sterilizers, 833
Stress, in health staff, from pressure of work, 780
Student nurses, assessment of performance, 777
initiation and training in group nursing, 782
initiation training on a surgical ward, 791
Supplies, management, costs, control, 818
Surgery, pre-operative information, evaluation, 890

Teaching hospitals, London, reorganization, 752, 756
Tea-towels, paper disposable, evaluation, 824
Terminal care, 850
Transport problems, for visitors, to psychiatric hospitals, Netherlands, 894

United States, health insurance, 815
United States, statistics, collection, 806

Waiting lists, 795, 796
Wards, air-conditioning, 772
West Germany, electronic data processing, protection of information, 805
laundry costs and efficiency, 825
management efficiency, 793
proposed new finance legislation, 812
radiotherapy services, 859
Westeinde Hospital, The Hague, engineering installations, 766
Wilhelminan Hospital, Vienna, long-stay and rehabilitation department, 862
Work study, nurse tutors, 785

Addresses of publications referred to in this issue

JOURNALS—(*The price of a single issue is given where known*)

Administration Hospitalière et Sociale, 4237 Rue de Bordeaux, Montreal, Canada. $2.50
American Journal of Hospital Pharmacy, 4630 Montgomery Ave., Washington, D.C. 20014, U.S.A. $4.00
Anaesthesia, Blackwell Scientific Publications, Osney Mead, Oxford OX2 0EL, England.
Annals of Internal Medicine, 4200 Pine St., Philadelphia, Pa. 19104, U.S.A.
Architects' Journal, 9 Queen Anne's Gate, London SW1H 9BY.
Archives of Disease in Childhood, British Medical Assn., Tavistock Sq., London WC1H 9JR.
Argus des Collectivités, 10 rue Bleue, 75009 Paris, France. 13F
British Journal of Radiology, 32 Welback St., London W1M 7PG. £5.00
British Medical Journal, B.M.A. House, Tavistock Sq., London WC1 9JR.
Canadian Journal of Hospital Pharmacy, Pharmacy Dept., University Hospital, Saskatoon, Sask. S7N 0W8, Canada. $2.00
Canadian Medical Association Journal, P.O. Box 8650, Ottawa, Ont. K1G 0G8, Canada.
Chiropodist, 8 Wimpole St., London W1M 8BX.
Cleaning, Maintenance and Big Building Management, 4 Local Board Road, Watford, WD1 2JS
Computers and Biomedical Research, 111 Fifth Ave., New York, N.Y. 10003, U.S.A. *and* 15 Cavendish Sq., London W1M 0HT.
Deutsche Krankenpflegezeitschrift, Postfach 747, Urbanstrasse 12-14, 7000 Stuttgart 1, West Germany.
Family Planning Perspectives, 515 Madison Ave., New York, N.Y. 10022, U.S.A.
General Practitioner, Haymarket Publishing, 54-62 Regent St., London W1A 4YJ.
Health Bulletin, Scottish Home and Health Department, St. Andrews House, Edinburgh EH1 3DE, Scotland. £0.40
Health Services Research, Hospital Research and Educational Trust, 840 N. Lake Shore Drive, Chicago, Ill. 60611, U.S.A.
Hôpital Belge, 152 Ave. G. Demey, 1160 Bruxelles, Belgium. 100B.Fr.
Hôpital à Paris, 7 rue des Minimes, 75003 Paris, France.
Hospital Engineering, Earlsport Publications, 17 St. Swithin's Lane, London EC4.
Hospital Equipment & Supplies, 93-99 Goswell Rd., London EC2V 7QA.
Hospital Topics, 3807 Bond Place, Sarasota, Fla. 33582, U.S.A. $5.00
Hospitalis, Kreuzstr. 72, 8032 Zürich 8, Switzerland. Sw.Fr.7.00
Hospitalisation Privée, 81 rue de Monceau, 75008 Paris, France. 13F
Hospitals, 840 North Lake Shore Drive, Chicago, Ill. 60611, U.S.A. $2.00,
Journal of the American Dental Association, 211 E. Chicago Ave., Chicago, Ill. 60611, U.S.A.
Journal of the American Dietetic Assn., 430 North Michigan Ave., Chicago, Ill. 60611, U.S.A. $4.00
Journal of the American Medical Assn., 535 N. Dearborn St., Chicago, Ill. 60610, U.S.A.
Journal of Clinical Pathology, B.M.A. House, Tavistock Sq., London WC1H 9JR.
Journal of Health and Human Resources Administration, P.O. Box 4434, Montgomery, Alabama, 36101, U.S.A.
Journal of Health Politics, Policy and Law, Duke University Press, 6697, College Station, Durham, N.C., U.S.A.
Journal of Human Nutrition, 48 Poland St., London W1V 4PP. £3.00
Journal of Infectious Diseases, University of Chicago Press, 5801 St. Ellis Ave., Chicago, Ill. 60637, U.S.A. $7.00
Journal of Librarianship, The Library Association, 7 Ridgmount St., London WC1E 7AE.
Journal of Long-term Care Administration, 4650 East-West Highway, Washington, D.C. 20014, U.S.A.
Journal of Public Health Dentistry, 2209 Lawrence Drive, Raleigh, N.C. 27603, U.S.A.
Klimaatbeheersing, Box 168, 3700 AG Zeist Netherlands.
Krankenhaus, Postfach 747, Urbanstrasse 12-14, 7000 Stuttgart 1, West Germany.
Krankenhaus-Umschau, Postfach 1149, Oskar, von-Miller-Strasse 5, 8650 Kulmbach (Bayern), West Germany.
KS-nytt, Karolinska sjukhuset, 104 01 Stockholm 60, Sweden.
Medical Journal of Australia, P.O. Box 116, Glebe, N.S.W. 2037, Australia.
NATNews, Sherwood House, Matlock, Derbyshire DE4 3LT, England.

Natural Gas, 25 New Street Square, London EC4A 3JA.
Nursing Outlook, 10 Columbus Circle, New York, N.Y. 10019, U.S.A. $3.00
Ospedale, Corso Turati 46, 10128 Torino, Italy. L.1,000
Österreichische Krankenhaus-Zeitung, Klopstockgasse 34, 1170 Wien, Austria. Sh.35
Patient Counseling and Health Education, Excerpta Media, Box 211, 100 AE Amsterdam, Netherlands.
Physical Therapy, 49 Sheridan Ave., Albany, N.Y. 12210, U.S.A.
Plumbing, Institute of Plumbing, Scottish Mutual House, North St., Hornchurch, Essex, RM11 1RU, England.
Practitioner, 30 Calderwood St., London, SE18 2BP. £1.00
Refrigeration and Air Conditioning, Davis House, 69-77 High St., Croydon, CR9 1QH, England. £0.25
Revue Hospitalière de France, Avenue d'Italie, 45013 Paris, France.
Science, 1515 Massachusetts Ave., N.W., Washington, D.C. 10005, U.S.A.
Sjukhuset, Hallegatan 13, 417 02 Göteborg, Sweden. 10.00kr
Social Science and Medicine, Headington Hill Hall, Oxford, OX3 0BW, England.
Sykehuset, Waldemar Thranesgt, 73, Oslo 1, Norway.
Sygeplejersken, Vimmelskaftet 38, Postbox 1084, 008 København K. Denmark.
Technische Gids voor Ziekenhuis en Instelling, Tesselschadestraat 18-22, Postbus 6332, 1054 ET Amsterdam, Netherlands. D.fl.6
Tecnica e Metodologia Economale, Viale Gramsci 19, 56100 Pisa, Italy. L.2,500
Tecnica Ospedaliera, via Moscova 46/9, 20121 Milano, Italy.
Vårdfacket, Box 3260, 10365 Stockholm, Sweden.
Ziekenhuis, NZR, Postbus 9696, 3506 GR Utrecht, Netherlands. D.fl.3.25.

PUBLISHERS

Church Hill House Hospital, Easthamstead, Bracknell, Berks, England.
Croom Helm Ltd., 2-10, St. John's Rd., London SW11.
Department of Health and Social Security, Alexander Fleming House, Elephant & Castle, London SE1 6BY.
Health Administration Press, M2210, School of Public Health, University of Michigan, Ann Arbor, Mich. 48104, U.S.A.
Heinemann Medical, 23 Bedford Sq., London WC1B 3HT.
Her Majesty's Stationery Office, (HMSO), P.O. Box 569, London SE1 9NH.
King's Fund Centre, 126 Albert St., London NW1 7NF.
Little, Brown & Co., 34 Beacon St., Boston, Mass. 02106, U.S.A.
MIND (National Association for Mental Health), 22 Harley St., London W1N 2ED.
Office of Health Economics, 162 Regent St., London W1R 6DD.
Polytechnic of North London, Medical Architecture Research Unit, Holloway, London N7 8DB.
Royal College of Physicians of London, 11 St. Andrew's Place, London NW1 4LE.
South Glamorgan Health Authority, Cathays Park, Cardiff CF1 3NW, Wales.
United States, National Center for Health Statistics, 5600 Fishers Lane, Rockville, Md. 20852, U.S.A.
University of London, Athlone Press, 2 Gower St., London, WC1.
Williams & Wilkins, 428 E. Preston St., Baltimore, Md. 21202, U.S.A.
World Health Organization, Avenue Appia, Geneva, Switzerland.

Printed in England for Her Majesty's Stationery Office by Holmes & Sons (Printers) Ltd.
D/d 0698193 K9 7/80 11457 Andover, Hampshire.

HER MAJESTY'S STATIONERY OFFICE

Government Bookshops

49 High Holborn, London WC1V 6HB
13a Castle Street, Edinburgh EH2 3AR
41 The Hayes, Cardiff CF1 1JW
Brazennose Street, Manchester M60 8AS
Southey House, Wine Street, Bristol BS1 2BQ
258 Broad Street, Birmingham B1 2HE
80 Chichester Street, Belfast BT1 4JY

Government Publications are also available through booksellers

ISBN 0 11 722668 8
ISSN 0018 5507

HOSPITAL ABSTRACTS, VOLUME IV, NO. 9 HMSO